## STANDARD COTTONIMILL PRACTICE AND EQUIPMENT

1921

THE YEAR BOOK OF THE NATIONAL ASSOCIATION OF COTTON MANUFACTURESS

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### CHANGE OF TITLE

Beginning with the 1922 edition, the Year Book of the Association will carry the title "Cotton Manufacturers Manual." The name is to be changed on account of the broadened scope of the publication. The Year Book now includes a large volume of statistics concerning commercial phases of the cotton industry, and it has been deemed best to change the title so that it will conform to the contents.

RUFUS R. WILSON,

Secretary, National Association of Cotton Manufacturers



LOCATION OF COTTON MILLS IN THE UNITED STATES

DOTS SHOW LOCATION OF INDIVIDUAL ESTABLISHMENTS. BLACK SQUARES SHOW CENTERS OR DISTRICTS WHERE MORE THAN TEN ESTABLISHMENTS ARE LOCATED

### STANDARD COTTON MILL PRACTICE

AND

### **EQUIPMENT**

WITH CLASSIFIED BUYER'S INDEX

Compiled and Edited by

### ALSTON HILL GARSIDE

Statistician of The National Association of Cotton Manufacturers



1921

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ALSTON HILL GARSIDE,

Editor of Year Book

The National Association of Cotton Manufacturers.

Boston, Massachusetts.





### THE TRADE IN RAW COTTON IN 1920

### By Arthur Richmond Marsh

Editor of the Economic World

Were it possible for cotton merchants to look back upon their experiences during the year 1920 quite dispassionately and disinterestedly, it is safe to say that they would find them dramatic to an extent scarcely paralleled in all commercial history. In particular, the contrast presented by the conditions existing in the cotton trade in the early part of the year, as against those with which merchants had to contend as the year drew towards its close, is one of the most violent of which we have any record.

In the eyes of the outside observer, of course, the essential feature of this contrast consists of the tremendous change in the general price level for raw cotton of American and other growths which occurred between the Spring and the Fall of the year,—a price change the like of which can be found in connection with cotton only during and after the period of acute cotton famine produced by the American Civil War, and of a kind which had always been assumed by the present generation of cotton merchants to be entirely beyond the bounds of possibility under latter-day conditions of world-wide production and distribution of cotton.

From the point of view of those actually engaged in the cotton business, however, the decline of nearly 70 per cent. in the general price of the commodity which came about from July to December, 1920, though naturally it gave rise to some problems of a more or less difficult character, was much less a cause of anxiety and loss than were the quite unprecedented alterations of the relative values of the various qualities and grades of cotton which occurred simultaneously with the general downward movement of the price.

### Value of "Hedging" Demonstrated

As a matter of fact, owing to the practically universal use by the cotton trade of the highly developed system of insurance against losses from general price changes by means of "hedging" contracts for future delivery on the great cotton exchanges, the past year's decline in the cotton markets, extraordinarily extensive though it was, would in itself have created only temporary and relatively unimportant difficulties for the majority of prudent merchants. In this respect, indeed, the cotton trade proper had a very great advantage, as compared on the

one hand with the producers of cotton whose loss through the fall of the price was for the most part complete and unmitigated, and on the other hand with the dealers in the long list of commodities for which no futures or "hedge" markets have been developed.

But as regards abnormal changes in the relative market values of the different qualities and grades of cotton, those engaged in the distribution of this commodity are still quite without the protection of price insurance afforded by any form of "hedging"; and in this particular the readjustment which took place in the latter part of 1920 was even more sweeping and of a character to produce even greater losses for merchants than was that of the general price. Accordingly, though public attention has been almost exclusively directed to the enormous decline in the price of cotton as commonly quoted in the markets, and though this decline has seemed the phenomenon of primary consequence to the cotton producers on the one side and perhaps to the ultimate consumers of cotton on the other, within the cotton trade itself the chief concern since the beginning of the débâcle has been with the irresistible changes for the worse of the relative market values of qualities and grades of cotton which were abnormally in demand when the year 1920 began and abnormally out of demand when the year ended.

### Causes of Abnormalities early in 1920

It is difficult to give an adequate conspectus of the conditions existing in the domestic and foreign markets for cotton in the first months of 1920; the forces and influences operating to produce extreme abnormalities of one and another kind were so numerous and so various in nature as to render it well-nigh impossible to include them all. The first matter to engage our attention, naturally, is that of the general price level, whether for American cotton or for cotton of other growths. It is a well-remembered fact that even before the end of 1919 the price of "bread and butter" Middling Upland American cotton had risen in the markets of the United States far above any price known since the period of the Civil War; while in Liverpool and upon the Continent of Europe the highest prices even of the Civil War period had been exceeded—though here some allowance must be made for the depreciation of the European currencies.

The immediate causes of this great advance in the market value of the common run of American cotton had been reasonably apparent. First and foremost among them was an even more rapid rise in the prices of staple cotton goods both in the United States and abroad. In this country the cotton goods markets throughout most of 1919 and well on into 1920 were affected to an exceptional degree by the remarkable monetary and bank credit expansion, accompanied by multifarious speculation, by which the period will be remembered in the country's economic history. In Great Britain the tremendous rise in the price of silver, and of the exchanges upon the silver-using countries of the Far East and elsewhere, automatically produced a corresponding enhancement of the prices of cotton yarns and cloths, and widened the margin of profit of cotton spinners and manufacturers in the most astonishing fashion, enabling them to pay with indifference almost any price for their raw material.

On the Continent of Europe the progressive depreciation of the currencies of the different countries—a depreciation immediately reflected in rapid increases of prices for all products—appeared for the time being to give manufacturers and merchants incessantly enlarged profits upon their turnover and lured them into increasing the scale of their ventures for the purpose of reaping the benefit of these profits to the utmost. Finally, in far-away Japan, the spirit of speculation, kindled by the events of the war period, was raised to the highest pitch by the seemingly inexhaustible purchasing power of the populations of China, India, and other Asiatic countries which resulted from the extraordinary prices obtained by these countries for the stocks of foodstuffs and raw materials accumulated during the later years of the war and precipitately bought by Europe and America as soon as there was ocean tonnage to move them.

### Short Crop in 1919 Caused Apprehension

These influences alone, effective in the world's markets for cotton goods, were sufficient to bring about steadily advancing markets for raw cotton so long as their intensity remained undiminished. Their potency was much increased, however, by the conditions of cotton production in 1919 in all the cotton-growing countries, but especially in the United States. While the 1919 cotton crop was relatively small in both Egypt and India, the season was singularly unpropitious in the United States in respect both of the quantity and of the quality of the crops. Here a most unsatisfactory growing season followed by incessant and destructive rains through the Fall months produced general apprehension among spinners lest the supply of so-called "spinnable" American cotton should prove totally inadequate for the pressing demand from all over the world.

As a result, eagerness to fill the year's requirements of their mills before it should be too late led spinners everywhere to make commitments for American cotton for immediate and future delivery upon a scale the like of which the cotton trade had never before known in its entire history. This insatiable demand, by its very magnitude, could have no other effect than to force the price of "spinnable" American cotton higher and higher through the last months of 1919 and the early months of 1920.

But even this is not the whole story of the cotton situation at the beginning of the past year. Reference has been made above to remarkable abnormalities that came to pass during the period of excitedly rising prices for cotton, in respect of the relative market values of the different grades and qualities of cotton—abnormalities which were to prove in the long run far more a source of trouble and loss to the cotton trade proper than even the most violent changes in the general price level for cotton. This trouble and loss, in fact, extended beyond the class of cotton merchants, reaching the manufacturers and even indirectly the distributors of cotton goods. For when the period of general price readjustment was entered upon, some of the greatest difficulties and the most painful shrinkages of value for the cotton industry and the cotton goods trade had their origin in what may be called the price excesses that had come about in connection with certain of the grades and qualities of raw cotton.

### Extraordinarily Wide "Differences" Developed

In the parlance of the cotton trade, these abnormalities, these price excesses, took the form of unprecedented exaggerations of the "basis" for the different grades and qualities of cotton—the "basis" being the relative market value or price for each particular grade or quality in comparison either with the price of the agreed-upon "basis grade" of Middling Upland (in the case of American cotton) or in comparison with the going price of contracts for future delivery in the great cotton exchanges. In the last resort these relativities of value, or "differences," rest in part upon the differing economic worth of the several grades of cotton in the process of manufacture and in part upon the developed demand and supply situation in respect of the various qualities of cotton and of the goods produced from them.

In the ordinary conduct of the cotton business, however, both merchants and manufacturers have until within the past two or three years been accustomed to apply in their transactions "basis" valuations for the various grades and qualities of the raw material which were almost conventional in character, since they reflected a long tradition of market experience and were generally accepted as corresponding with sufficient accuracy to the intrinsic economic worths of the cottons themselves. Thus, in the markets for American cotton the grades of Upland cotton above and below Middling had their appro-

priate "basis" valuations, ruling year after year within comparatively narrow limits, in the form of so many market points "on" or "off" the going price of Middling or "on" or "off" the going price of contracts for future delivery upon the American or European cotton exchanges. Similarly, the various lengths of "staple," or fibre, in excess of the <sup>3</sup>/<sub>4</sub>-inch to one-inch "staple" which is characteristic of Upland cotton of American growth, were appraised upon an ascending scale of market points "on" the going price of Middling Upland.

And everybody concerned with the merchandising and manufacture of cotton was entirely familiar with these "differences" and was accustomed to rely upon their substantial uniformity and permanence in making commitments in cotton, whether for the present or for the more or less distant future. In the same manner, the relativities of value of cottons of growths other than American—Egyptian, East Indian, Brazilian, Peruvian, etc.—were matters of common and traditional knowledge in the world's cotton trade, and were currently employed in the multitudinous dealings in these cottons.

In the later months of 1919 and the earlier months of 1920, however, powerful commercial and industrial forces came into play which profoundly disturbed and distorted these relativities of value as the trade had long known and observed them. In the markets for American cotton an unprecedented pressure of demand for the higher grades of eotton, at the expense of the lower, began to manifest itself. Spinners and manufacturers the world over appeared suddenly to desire only the grades of Middling and above, regardless both of the absolute and of the relative price of these grades, and irrespective of their economic or manufacturing worth in comparison with the grades below Middling. The latter, in fact, became almost totally neglected and a positive drug in the markets. Various explanations were given of this novel phenomenon—one being that such high prices were being obtained in the world's markets for varns and cloths that it was inexpedient to employ in manufacture any but the superior grades of cotton, and another that mill-workers everywhere, elated with high wages and eager to make maximum earnings, objected to the slower and more tedious processes required in the spinning and weaving of cotton of the lower grades.

### Shortage of High Grades in 1919 Crop

Whether these explanations are adequate or not, the fact is certain that in the last half of 1919 the clamor for the better grades of American cotton was universal, with the inevitable consequence that the "basis" for these grades began to rise by leaps and bounds. To make the matter worse from the standpoint of the cotton trade, moreover, the

weather over practically the entire Cotton Belt in the United States was excessively bad throughout the fall of 1919, the picking of the season's crop was delayed by incessant heavy rains, and when at length the cotton had been picked its average grade was found to have been lowered to a quite unparalleled extent. The effect of the conjunction of a tremendous demand for the higher grades regardless of price and of a crop containing an abnormally large proportion of low grade cotton and an abnormally small proportion of high grade cotton can easily be imagined. The "basis," or relative price, of the higher grades increased beyond all economic reason, while that for the lower grades decreased with equal rapidity.

In the mean time, these same influences and still others of a commercial and industrial nature were even more powerfully affecting the relative and the absolute values of all cottons, of whatever growth, possessing extra "staple," or length of "fibre." Without attempting to discuss in detail the other influences referred to, one in particular may be mentioned as having produced perhaps more violent effects than any other cause in enhancing the market price of all cottons of the very long staple type. This influence was the tremendous expansion of the automobile tire industry in the United States—an expansion now known to have been far beyond even the extremest needs of the automobile industry proper, at least for a long period to come, yet none the less productive of numerous commercial abnormalities while it was in progress.

As a cotton fabric forms the basis of the automobile tire, and as until recently it has been generally believed that this fabric, in order to be durable, must be manufactured only from cotton of the maximum length of fibre and tensile strength, the sudden vast increase in the production of tires in this country (as well as some increase in other countries) resulted in a corresponding increase in the demand for the long staple cottons of American and Egyptian growth, diverted great quantities of these cottons from other branches of the textile industry which depended upon them, set up an intense competition for them all over the world, and drove the price of them upward with fairly dizzving rapidity. How vertiginous this rise was is illustrated by the fact that in the early months of 1920 cottons suitable for automobile tire fabrics, which in the pre-war years had had a market value of from 350 to 500 American market points (or 150 to 250 Liverpool market points) "on" the going price of future contracts upon the cotton exchanges, were selling at from 7,000 to 8,000 American points (or 3,500 to 4,000 Liverpool points) "on" the price of such contracts—and the contract price itself had advanced some 200 per cent.

### Dangerous Position of the Trade

The situation as regards the extreme abnormalities of relative value for the better grades and qualities and the longer staples of cotton, which has just been described as having come about in the latter part of 1919 and the earlier months of 1920, proved later in 1920 to be of an importance that can scarcely be exaggerated as a source of distress and loss for the world's cotton trade—and, for that matter, for the cotton industry as well. When the Spring and Summer of 1920 arrived, the stocks of cotton in the hands of the merchants and manufacturers of all countries consisted predominantly of these excessively valued cottons, the purchase of which had made necessary an unprecedented use of capital or bank credit, and the carrying of which through the stages of distribution and manufacture involved so over-extended a loan position on the part of the trade and industry as a whole that the hazards of price changes were enhanced to an unheard of extent.

To make the position more dangerous, the usual method of "hedging" against fluctuations of price by means of future contracts on the great cotton exchanges had lost the greater part of its efficacy, since these contracts afforded virtually no protection against losses due to the shrinkage of the grossly exaggerated relative values of the cottons in question. It should be added, too, that the risks which the cotton trade and industry were compelled to carry were not confined to those implied by the stocks of actual cotton, in whosesoever hands these might be, but were vastly enlarged by the extensive forward commitments for similarly valued cottons, reaching many months ahead, which had of necessity been entered into in the normal course of business.

Looked at in retrospect, the above-described position of the cotton trade and industry in the early part of 1920 is clearly enough seen to have depended for its secure maintenance upon the undisturbed and uninterrupted operation of a wide range of economic factors, many of which were quite beyond the control of those concerned with cotton and the products of cotton. First of all, of course, it was necessary that there should be no intermission of the intense demand for cotton goods of every kind in all the important manufacturing and consuming countries, no pause in the distribution of cotton goods at the excessively high price level that had been reached by the beginning of 1920, no interruption or restriction of the vast bank credits required by the sum total of transactions at such a price level,—in short, no financial, industrial, or commercial hitch anywhere in connection with the cotton trade and industry themselves.

But all this was conditioned upon the persistence of economic influences of a still wider scope. Such an influence was the exceedingly high price to which silver had risen and the effect thereof upon the Far Eastern exchanges and consequently upon the purchasing power of the great consuming countries of the Far East and to some extent of South America. Another similar influence was the unprecedented expansion of bank and other credits in all parts of the globe, due in some countries, like the United States, Great Britain, and Japan, to the progressive exhaustion of the ultimate credit resources of the banks by the operations of manufacturers and merchants; in others, like those of Continental Europe, to excessive issues of depreciated currency—but everywhere resulting in a steady enhancement of commodity prices, wages of labor and the like, and giving the impression of widespread prosperity and unheard-of consuming and buying ability on the part of the mass of the population.

### The First Note of Warning

The first note of warning with respect to an impending interruption of the operation of these powerful expansionary influences was sounded in the United States towards the end of 1919, when the Federal Reserve Board became apprehensive at the rapid approach of the loans of the banks to the limit of safety as established by the Federal Reserve Act and intimated the desirability of a prompt reduction of such loans as were of a primarily speculative character, especially those made in furtherance of Stock Exchange commitments. As a result of this warning, a preliminary liquidation promptly set in upon the American securities markets and prices there fell rapidly. At first, however, industry and commerce were so little affected by these events that all and more than all the bank credit released by the contraction of the securities loans was immediately absorbed by the demands of trade; commodity prices, wages, etc., rose more rapidly than before, and the expansion of industry and trade was intensified rather than checked. And if this was the case in the United States, where a clear warning had been given, it was still more the case in Great Britain, and on the Continent of Europe, where the belief in a long period of industrial and commercial activity and prosperity was well-nigh universal—this belief resting upon the conviction that the wastes of the war must be made good before any slowing down of production could occur.

It was not, in fact, until March and April, 1920, that British and European confidence received the least shock. This came from a sudden break in the price of silver, accompanied by a corresponding decline in the exchanges upon the silver—using countries of the Far

East. Even this occurrence, however, was not very seriously regarded at the outset, as its causes were obscure and it was believed to be only temporary in character. The intermission of new Far Eastern buying of British and European goods which it produced was the less felt because the volume of commitments for goods already made at excessively high prices for Far Eastern account was enormous, and these commitments extended many months into the future. Seemingly, there was not the least suspicion that the validity of these very commitments was ultimately to be endangered by the course of the silver market and of the Far Eastern exchanges, and that staggering losses were soon to be experienced by the merchants and manufacturers having them upon their books.

### The Crisis in Japan

Following close upon the abrupt decline of the price of silver and of the Far Eastern exchanges, however, came a much more significant indication of approaching disturbance of a far-reaching kind in the world's economic affairs. Towards the end of April, reports from Japan began to disclose the existence of a destructive commercial and financial crisis in that country. The extent of the trouble was not at first appreciated in the Occidental countries, but its repercussions were speedily felt. One of its earliest effects was a collapse in the world's markets for raw silk, speedily followed by a similar terrific decline in the markets for silk fabrics of every description. Here was the first open and visible breach in the general structure of super-inflated commodity prices the world over, and the psychological influence of the crash in numerous directions, but particularly in the textile trade and industry as a whole, can scarcely be exaggerated.

Something of doubt was east upon all textile values, and this doubt was shared by a great variety of persons—by textile manufacturers and merchants, by ultimate consumers of textiles and, in some respects worst of all, by bankers financing the manufacture and distribution of all manner of textile products. The argument was only too obvious that if silk and its products could suddenly decline 50 or 60 per cent, in value, there was nothing to prevent the same thing from happening with wool and its products or with cotton and cotton goods.

For reasons somewhat difficult to explain, the immediate shock to confidence from the panic in Japan was severer in the United States than in Europe, and its general economic consequences were more quickly perceptible. Within less than a month after the news of it reached this country, American distributors of goods for ultimate consumption, and especially of textiles and the like, became painfully

aware of a severe curtailment of buying on the part of the consuming public—of the initiation of what came to be known as the "buyers' strike." Not only merchants but also bankers soon began to feel something of alarm at the accumulation of unsold goods and at the coincident piling up of unliquidated bank loans. Desperate measures were speedily resorted to for the purpose of bringing the public back into the market; and during May and June announcements of "reduced price" sales on the part of department stores and other retail distributors were the order of the day in all the cities of the United States.

The effects of these announcements, however, were very far from being what had been hoped for and expected. The response of the consuming public to them was on the whole extremely disappointing; instead of increasing the offtake of goods, they seemed to intensify the feeling that prices were too high and that the strictest economy was in order. As stocks of goods still accumulated and as bankers became even more pressing in their requests for a liquidation of loans, apprehension with regard to the future spread rapidly among all classes of distributors, and they sought relief in whatever direction they thought they might be able to find it.

### Widespread Cancellation of Contracts

In particular, they were dismayed at the possibilities of loss involved in the very large quantities of goods for which they had contracted at very high prices for delivery months ahead, and great numbers of them wildly sought to escape from this loss by the outright cancellation of such contracts. Retailers endeavored to use this expedient with wholesalers, and wholesalers in their turn resorted to it with manufacturers. And of all the American industries producing for ultimate consumption, the textile industry, including its various subsidiary industries, appeared to suffer first and most severely. By the early summer of 1920 the silk industry in the United States was almost in a state of suspended animation; by midsummer the woolen industry was in a barely better plight; and by the early fall the cotton industry found itself in almost the same situation.

The first impression produced in Great Britain and most European countries by this course of events in the United States was one of profound astonishment. At the outset British and European comment upon the reports of what was happening in this country was largely to the effect that we were suffering from an attack of economic hysteria. The conviction long remained general on the other side of the Atlantic that the war had left as a heritage a universal shortage of goods and that the making up of this shortage would occupy productive industry

for a good many years to come. There were, to be sure, serious difficulties of international credit and the like to contend with, but these difficulties should not prove insuperable, especially for a country become so rich and strong as the United States had become by reason of the war. The industrial countries of Europe, however, could not long resist the influence of the economic disturbance in the United States, any more than the United States had been able to remain unaffected by the panic in Japan; indeed, they were far less able to do so because the financial and industrial situation in which they had been left by the war was immeasurably less strong than that of the United States.

Hence, before the past Autumn was far advanced, all the British and European industries producing for ultimate consumption were showing unmistakable signs of distress; the prices of their products were beginning to decline, they were getting scarcely any new business, they were being forced to curtail their operations, and, what was more disturbing still, they were finding that a large part of the forward sales of goods upon which they had been counting were unsubstantial and a source of heavy loss instead of a handsome profit. This was particularly the case with the textile industry, and above all the cotton industry, which found itself precipitated from the heights of the most extravagant prosperity it had ever known to the depths of an equally unprecedented depression and distress.

### Cotton Price Sustained by Crop Conditions

Returning now to the vicissitudes of the cotton trade proper during the past year, it may be said that the full magnitude of the trials and losses that were to befall it was obscured until well on into the Summer by the fact that up to that period the promise of the season's American crop was exceedingly poor. The planting season had been extraordinarily late and unpropitious, the start of the crop was extremely unsatisfactory, the early summer was excessively wet over a large part of the Cotton Belt, and the first official estimates of the expectancy of yield were so low as to make a positive crop disaster seem not improbable. The prospect was, in fact, for the sixth short American cotton crop in succession—and this much the shortest of the series. The effect of this outlook, of course, was to sustain the price of cotton in the face of the unfavorable conditions that were developing in the cotton industry and the cotton goods trade.

In fact, the highest prices attained in the markets of the United States by cotton of American growth throughout the entire period of the war and post-war inflation were touched as late as July 23, 1920,

when "basis Middling" contracts in the New York Cotton Exchange sold at 43¾ cents per pound. (It should be said, perhaps, that the highest prices commanded by American cotton in Great Britain were reached in February and March.) Moreover, the expected scarcity of the supply had prevented up to that time any important change for the worse in the excessive relative values of the better grades and qualities and of the longer staples of cotton, of which mention has been made above.

In early August, however, the entire picture began to change rapidly and fundamentally. An unexpected improvement in the weather and growing conditions occurred over the greater part of the Cotton Belt, the expectancy of yield of the crop suddenly began to increase, and it soon became apparent that the season's supply of American cotton would be abundantly adequate to meet the steadily diminishing prospective demands of the world's cotton industry. Naturally, this complete alteration of the outlook at once rendered effective all the depressing influences of every kind with which the cotton industry and the cotton goods trade in the United States and elsewhere were obliged to contend. And thus was initiated the remarkable decline in the price of cotton which continued virtually without interruption to the very end of 1920,—a decline which at its maximum has amounted to more than 70 per cent. of the value of the commodity when at its highest barely six months ago.

### Great Collapse in Premiums for Better Qualities

Furthermore, it must be borne in mind that this great decline was simply that which occurred in what may be called the general or absolute price level of bread-and-butter cotton of American growth, as this level is indicated by the quotations for "basis Middling" contracts on the great cotton exchanges or by the quotations for Middling Upland cotton in the leading spot markets. What was infinitely more serious from the standpoint of the cotton trade was the even greater proportional decline in the market values of the superior grades and staples of cotton, whose market valuations in comparison with "basis Middling" contracts or with Middling Upland cotton "on the spot" had risen to heights never before known in the entire history of cotton. It has been from the collapse of these excessive valuations that the most painful losses have resulted both for the cotton trade proper and for manufacturers everywhere who had bought or contracted for supplies of the cottons in question.

Thus, while the total decline in the price of "basis Middling" contracts on the American exchanges and of Middling Upland cotton in the American spot markets has been not far from 30 cents per pound, or \$150 per bale, some of the longer-stapled cottons of the higher grades have fallen 60 cents, 80 cents, and even \$1 per pound, equivalent to \$300, \$400, and \$500 per bale. And against these losses merchants and manufacturers have had virtually no "hedge" or at any rate only so much of a "hedge" as was afforded by the "basis Middling" contracts on the exchanges. It is scarcely to be wondered at that so extraordinary a loss in market value, within so brief a space of time, of a raw material of such universal use and necessity as cotton, has appeared to great numbers of persons in the cotton trade and industry almost unbelievable, even after the event. These persons are completely bewildered as to the causes, as well as totally incredulous as to the permanence, of the enormous decline.

The immediate causes, however, are not particularly difficult to make out, though it may be admitted that there is a certain obscurity as regards the coming to pass of such a conjuncture of the world's economic conditions and circumstances as to bring these causes into operation. Briefly summarized, the causes of the great decline in the price of cotton have been, on the one hand, a sudden curtailment upon an unprecedented scale of the world's offtake of cotton goods of all kinds and hence of the consumption of raw cotton by the mills in all countries; and, on the other hand, an intense pressure upon banking and credit resources everywhere, which has rendered extremely difficult the carrying forward of the superabundant supply of cotton to the time when the demands of consumption should reassert themselves.

### Consumption of Cotton Cut in Half

It is probably not far from correct to say that the rate of consumption of cotton by the mills throughout the world in the last months of 1920 has not been more than 60 per cent. of what it was in the cotton year 1919–20 and not much more than 50 per cent. of what it was in cotton year 1913–14. So extreme a reduction of consumption, of course, has resulted in a rapid accumulation in first and second hands of stocks of the raw material, and this at a time when the banks and bankers of all countries were exceedingly averse to any enlargement of their credit commitments.

As to the permanence of the price level for cotton obtaining at the end of 1920, it would obviously be hazardous to express an opinion unless for a comparatively long period in the future. The present facts undeniably are the still superabundant supply of cotton, the still greatly reduced consumption in all countries, and the still severely congested

condition of the world's financial affairs—all powerful factors making against an early and considerable enhancement of the market value of cotton. Yet, on the other hand, it seems decidedly improbable from the standpoint of economic science that the average price of this indispensable raw material over a period of, say, five years from 1921 onward will prove to be as low as, or lower than, the average price it commanded for the five years preceding the outbreak of the European war. Beyond this very general estimate of the probabilities of the movement of the price of cotton in the nearer future it is perhaps as yet hardly safe to go.

### WORLD'S COTTON PRODUCTION

Statistics of the world's cotton production are only rough estimates at the best, for the following reasons:—

- (a) Accurate information is not available as to the production of China, Russia, and a number of other cotton-producing countries. Estimates of the Chinese crop vary by two or three million bales, ranging from four to six million in normal years. It is believed that the Russian crop has declined since the revolution from one and one-quarter million to less than half a million bales, but there are no data to be had on which to base reliable estimates.
- (b) The cotton is packed in different parts of the world in bales which vary greatly in weight, the range being all the way from about 225 to about 750 pounds. In some cases there is a great variation in the bale weights within a single country. Under these conditions it is impossible to ascertain the world's cotton production in bales of one uniform size.
- (c) In some countries, notably China and India, a great volume of cotton is spun and woven in the homes of the people. As this cotton never reaches the large manufacturing centres or cotton markets, it cannot be counted. Such cotton is estimated to amount to four or five million bales per year in the aggregate.
- (d) The production of linters presents another complication. Some authorities include linters, others do not. The production of linters in the United States has ranged in recent years from about 600,000 bales to over 1,300,000.

Statistics of the world's cotton crops may refer to the actual growth in a given year (including or excluding linters, and including or excluding cotton used in home manufacture in India and China) or to what is known as the "commercial crop," i.e., cotton which is marketed in the year referred to. The "commercial crop" of cotton in any year may vary considerably from the actual growth in that year, according

to whether part of the cotton produced was held back from the markets of the world, or the world drew upon the reserves accumulated in previous years.

The following table gives the estimates of the world's cotton production as compiled by four leading authorities. It should be noted that these estimates are compiled on different bases as follows:—

The estimates of the United States Bureau of the Census are in bales of 500 pounds net. They include merely cotton produced for factory consumption. Through 1908 these estimates include linters. Beginning with 1909 they are exclusive of linters.

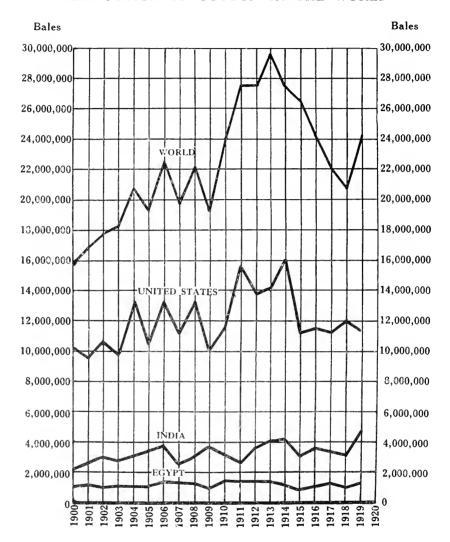
The estimates from Shepperson's "Cotton Facts" are in bales of 500 pounds gross. They include cotton entering into both home and factory manufacture. They include linters.

The estimates from Countelburo's Annual Cotton Hand Book are in running bales, and include cotton entering into both home and factory manufacture. They include linters.

The estimates of the Commercial and Financial Chronicle are in bales of 500 pounds net. These estimates refer to commercial crops, *i.e.*, the cotton marketed during each season as distinguished from the actual growth. They include linters.

	U. S. Bureau of Census, Bales of 500 lbs. Net	Shepperson's Cotton Facts, Bales of 500 lbs. Gross	Comtelburo's Annual Cotton Handbook, Running Bales	Commercial and Financial Chronicle, Bales of 500 lbs. Net
1900	_	_	15,513,000	13,632,454
1901	-	_	16,739,000	14,413,949
1902	_		17,013,000	14,726,687
1903	 _	_	18,152,000	14,159,341
1904	18,803,000	_	20,633,000	17,944,056
1905	 15,747,000		19,457,000	15,651,533
1906	 10,942,000	-	22,473,000	18,614,166
1907	 16,512,000	arm.	19,851,000	15,475,642
1908	 19,698,000	-	22,301,000	17,985,920
1909	 16,241,000	19,623,000	19,409,000	15,246,528
1910	 18,027,000	22,802,200	24,027,000	10,802,737
1911	21,269,000	24,738,700	27,560,000	20,529,915
1912	 20,976,000	24,053,000	27,506,000	19,197,979
1913	21,618,000	25,035,600	29,808,000	20,914,660
1914	 23,768,000	27,001,000	27,643,000	19,578,954
1915	 17,649,000	20,823,000	26,758,000	17,371,166
1916	 18,092,000	21,514,000	24,247,000	18,023,337
1917	 17,343,000	20,880,000	22,164,000	16,785,660
1918	 17,040,000	21,082,000	20,905,000	16,861,959
1919	 19,260,000	10,842,000	24,237,000	17,964,453

### PRODUCTION OF COTTON IN THE WORLD



The above chart is based on the statistics on the next page. It shows the production of cotton in the United States, India, and Egypt in equivalent 500-pound bales and the total estimated production of the world in running bales. Statistics for the United States, India, and Egypt were compiled by the United States Bureau of the Census. The estimates for the world are from Comtelburo Ltd.'s Annual Cotton Handbook.

### PRODUCTION OF COTTON IN THE WORLD

(Statistics for the United States, India, and Egypt were compiled by the United States Bureau of the Census.

The totals for the World are from Comtelburo Ltd.'s Annual Cotton Handbook)

Year	United States (In Equivalent ( 500-Pound Bales Exclusive of Linters)	India In Equivalent 500-Pound Bales)	500-Pound (In	World Running Bales, cluding Linters
1900	. 10,123,027	2,162,018	1,077,000	15,513,000
1001	9,500,745	2,648,586	1,202,000	10.739,000
1902	10,030,045	3,000,430	1,157,000	17,013,000
1903	9,851,129	2,863,714	1,280,000	18,152,000
1004	13,438,012	3,060,800	1,251,000	20,033,000
1905	10,575,017	3,389,600	000,181,1	10,457.000
1000	13,273,800	3,926,400	1,377,000	22,473,000
1907	11,107,170	2,407,600	1,433,000	10,851,000
1908	13,241,700	2,052,800	1,337,000	22,391,000
1000 .	040,100,01	3,774,400	000.000,1	19,409,000
1010 .	010,800,11	3,082,400	1,500,000	24,027.000
IQII .	15,692,701	2,630,400	1,403,000	27,560,000
1012 .	13,703,421	3,688,000	1,402,000	27,500,000
1013	14,150,480	4,052,000	1,522,000	20,808,000
1014	10.134,030	4,107,200	1,280,000	27,643,000
1915	11,101,820	2,000,400	052,000	26,758,000
1016	11,449,030	3,001,000	000,510,1	24,247,000
IQI	11,302,375	3,200,000	1,240,000	22,164,000
1918	. 12,040,532	3,182,400	055,000	20,905,000
1010	. 11,420,703	4,070,000	000,051,1	24,237,000

### WORLD PRODUCTION OF LONG STAPLE COTTONS 1910 TO 1920

In Equivalent 500-Pound Bales

(Compiled by the Industrial Service Department of The Merchants National Bank of Boston)

	American Extra Staple Uplands, 115" and Over	Egyptians	Sea Islands	American Egyptians	Others	Total
1910	<u>.s</u> .	1,500,000	71.080	_	c so.	د <u>د</u> د.
1911.	<u>:</u> =	1,463,000	95,380	_	ist abl	ist abl
1912.	o Statisti Available	1,402,000	56,360	375	Statist vailabl	Statistics vailable
1913.	9. 9 Av	1,522,000	59,680	2,135		
1914	$^{ m No}_{\Delta}$	1,280,000	64,580	0,187	No.	$\overset{\circ}{N}$
1915	832,000	952,000	71,180	1,005	143,725	2,000,000
1916	1,009,000	1,012,000	03,000	3:331	132,600	2,250,000
1917	1,354,000	1,240,000	71,980	15,966	150,054	2,850,000
1918	1,359,000	955,000	40,900	40,343	104,757	2,500,000
1919	967,000	1,130,000	5,020	42,374	96,606	2,250,000
1920	1,200,000	1,237,000	1,380	91,905	110,055	2,050,000

Note.—1920 Statistics are preliminary estimates.

# WORLD PRODUCTION OF COMMERCIAL COTTON

Bales of 500 Pounds Net

(From statistics compiled by United States Bureau of the Census)

Total	18,027,000	20,976,000	21,618,000	23,768,000	17,649,000	18,092,000	17,343,000	17,940,000	19,260,000
All Other Countries	417,000	487,000	520,000	572,000	580,000	450,000	400,000	425,000	460,000
Peru	95,000	110,000	110,000	103,000	93,000	108,000	110,000	114,000	165,000
Mexico	147,000	140,000	150,000	125,000	125,000	140,000	125,000	130,000	200,000
Brazil	280,000	315,000	420,000	140,000	250,000	309,000	400,000	524,000	536,000
China 3	775,000	_			845,000	810,000	830,000	000,000	1,100,000
Esypt	1,506,000	1,402,000	1,522,000	1,286,000	952,000	1,012,000	1,249,000	052,000	1,139,000
Russia	981,000	939,000	1,030,000	1,247,000				550,000	420,000
India 2	2,722,000	3,328,000	3,692,000	. ,	2,630,000	3,242,000	2,840,000	2,822,000	4,316,000
United States	000,401,11	13,113,000	13,545,000	15,438,000	10,709,000			11,520,000	10,924,000
YEAR	0161	1911	1913	1914	1915				6161

4 Figures for United States do not include linters.

 $<sup>^3</sup>$  Figures for India do not include cotton used in home manufacture.  $^3$  Figures for China consist of cotton exported and consumed in spinning mills.

### REVIEW OF LAST TEN AMERICAN COTTON CROPS

### 1911 to 1920

- The very satisfactory prices paid for cotton during the few years prior to 1911 tended to increase the acreage in that year, a total of 36.681.000 acres being under cultivation at the end of June. Weather conditions were generally favorable throughout the belt and throughout There was ample moisture early in the Spring, but April the season. and May were exceedingly dry months, especially in the eastern states. and this interfered somewhat with getting stands. Later, during the growing season, drought was experienced, particularly in Texas and Oklahoma, but it was relieved before much damage was done. The weather was generally fair during the Fall, with killing frosts not coming until late, extending from October 23rd to November 3rd. The boll weevil was held in check in 1911, as a result of droughts in 1909 and 1910 and a killing frost at the end of the season in 1910. These climatic conditions in the two previous seasons greatly reduced the number of weevils. However, the pest spread into new territory. The acreage harvested was 36,045,000. The average yield per acre was unusually high, being 207.7 pounds. The crop was of bumper proportions, aggregating 15,553,073 running bales, counting round as half bales, exclusive of linters. The linters totalled 556,276 bales. making a total crop, including linters, of 16,109,349 bales. This was by far the largest crop produced up to 1911.
- 1912. Unusually wet weather in Arkansas and the states east of the Mississippi River during the Spring of 1912 made it impossible for growers to prepare the soil properly. Planting was delayed, and the growth of plants was retarded, with the result that the stand was uneven and was two to three weeks late. Floods caused a material reduction in the acreage devoted to cotton along the Mississippi River and also retarded planting in that section. Weather conditions in Texas, however, were favorable during the planting season. The area under cultivation at the end of June was estimated at 34,766,000 acres, a decrease of 1,915,000 acres from that of the previous year. Later in the season, the weather was generally favorable in both the eastern and western sections of the belt, but the injurious effects of the wet Spring in the sections referred to above could not be entirely overcome. Harvesting conditions were excellent, with killing frost late, about November 5th. The crop of 1912 was seriously affected

by insect pests. Weather conditions favored the spread of the boll weevil into new territory, and in some sections the crop suffered from cotton caterpillars, grass worms, and other pests to a greater extent than in former years. The acreage harvested was 34,283,000. The average yield per acre was above the average of the previous decade, being 190.9 pounds. The crop was more than two million bales less than that of 1911, but was still very large, aggregating 13,488,539 running bales, counting round as half bales, exclusive of linters. The linters totalled 602,324 bales, making a total crop, including linters, of 14,090,863 bales. The very high price of the crop led to quick picking and ginning, while the movement to the cotton centres and for export was extraordinarily rapid.

1913. The acreage in 1913 was the largest ever planted up to that year, the area under cultivation at the end of June aggregating 37,458,000 acres, compared with 34,766,000 acres in 1912. The crop as a whole got a late start and in the Atlantic coast states much replanting was necessary, probably about 25 per cent. of the total. During May and June, favorable weather conditions prevailed in all sections, offsetting to a degree the lateness of the crop and permitting the very late replanted cotton to get a good start. Favorable conditions continued, for the most part, in the Atlantic states and the greater portion of the middle Gulf states, enabling the plants in those sections to mature and fruit, and converting the early discouraging prospects into an excellent harvest. On the other hand, what promised to be a large yield in the area west of the Mississippi was reduced by prolonged drought and excessive heat to a poor yield. A frost about October 21 and another more extensive one a week later killed the plants through a large section of the belt. The weather was generally favorable during the harvesting season except in a few localities, particularly in eastern Texas and Louisiana, where excessive rains somewhat retarded picking and wrought much damage. Insect pests did less damage in 1913 than in 1912, though certain sections suffered more severely than ever before and the weevil spread into new territory. The acreage harvested was 37,089,000. The average yield per acre was less than the average of the previous decade, being 182 pounds. The crop was very large, aggregating 13,982,811 running bales, counting round as half bales, exclusive of linters. The linters totalled 631,153 bales, making a total crop, including linters, of 14,613,963 bales.

1914. The acreage planted in 1914 was again very large. The area under cultivation at the end of June was estimated at 37,406,000 acres, this being only 52,000 acres less than that in 1913. Conditions were to some extent unfavorable to the preparation of the soil and the

planting of the crop in about two-thirds of the belt. From the beginning of the year to the end of the planting season, the eastern states, particularly Alabama, Georgia, and the Carolinas, were abnormally dry, and the western states, Texas, Oklahoma, and Arkansas, abnormally wet. Some relief from the extremes of weather conditions began to be felt early in June, when refreshing showers fell in the dry districts and the excessive rains in the west ceased. In a few weeks it began to be feared that parts of Texas and Oklahoma would be damaged as much by drought as had been threatened by too much precipitation. But this danger passed. The situation in the east gradually developed from very poor to very bright prospects, so far as yield was concerned. At no time did the rainfall in the eastern states amount to normal, but the showers were so timely in recurrence and so well distributed that the promise of a poor yield was converted into a very gratifying outturn. Climatic conditions in the Fall were upon the whole favorable. No killing frost occurred until late in October. The crop was, in general, less seriously affected by insect pests than for some years previous. The extremely early frosts of 1913 killed the boll weevil in a district averaging about 20 miles in width around the outside of the entire infested area. However, conditions during the season favored the spread of the pest and some new territory was infested. The acreage harvested in 1914 was 36,832,000. The average yield per acre was the largest in many years, being 209.2 pounds. The crop was of record-breaking proportions, aggregating 15,905,840 running bales, counting round as half bales, exclusive of linters. The linters totalled 832,401 bales, making a total crop, including linters, of 16,738,241 bales.

The area planted in 1915 was smaller than in any year pre-1915. vious back to 1907. At the end of June only 32,107,000 acres were under cultivation, compared with 37,406,000 in 1914. The decrease was due to the demoralized state of the cotton market following the outbreak of the European war. During the Spring, the rainfall was excessive in a large part of the belt, including the Atlantic and central Gulf states and Oklahoma. Later, however, conditions became much more favorable in all of the cotton-growing states, except for droughty conditions in parts of Mississippi, Alabama, and Tennessee, and low temperatures in some states, particularly northern Texas, Arkansas, Oklahoma, and Tennessee, which checked the development of the plant. Tropical storms occurred in August. Although these were not very destructive in themselves, they resulted in spreading the boll weevil over a large area of previously uninfested country which suffered severely from the pest late in the season. The Fall weather was favorable, killing frosts not coming until late, about the middle of November. The acreage harvested was 31,412,000 acres. The average yield per acre was far below that of the year previous, being only 170.3 pounds against 209.2 pounds in 1914. The crop was only about two-thirds as large as that in 1914, aggregating 11,068,173 running bales, counting round as half bales, exclusive of linters. Linters totalled 944,640 bales, making the total crop, including linters, 12,012,813 bales.

The area planted in 1916 and under cultivation at the end 1916. of June totalled 36,052,000 acres. In most sections of the belt, preparation of the ground and planting were delayed on account of rain and low temperatures, and the crop as a whole was abnormally late throughout the growing season. However, the general condition of the crop was promising as late as July 1. In July, a destructive storm swept over the central and eastern states and was followed by a period of much rain, which caused shedding and deterioration and greatly favored the activities of the boll weevil. While some sections were receiving too much rain, Oklahoma and parts of Texas were suffering from drought. According to the estimates of the Department of Agriculture, the condition of the crop as a whole degenerated from 81.1 per cent. of normal on June 25th to 56.3 per cent. on September 25th. However, in practically the entire cotton belt, the weather was ideal for picking until the end of the year. The first killing frost, in the second week in October, did but little real damage and served mostly in hastening the opening of mature bolls. The boll weevil damaged the crop considerably, and infested an unusually large area of new territory. The acreage harvested was estimated at 34,985,000. average yield per acre was unusually low, being only 156.6 pounds. The crop was the second short one in succession, aggregating only 11,363,915 running bales, counting round as half bales, exclusive of linters. The crop of linters was the greatest on record, amounting to 1.300,163 bales. This made a total crop, including linters, of 12,664,078 bales.

1917. The acreage planted in 1917 was less than in 1916, but still was much larger than the low point reached in 1915. The area under cultivation at the end of June was estimated at 34,925,000 acres. Weather conditions during the Spring were unfavorable. Heavy rain and cool weather in the eastern part of the belt and dry weather in the west hindered preparation of the soil and other farming operations. Cool weather early in May in all portions of the belt resulted in slow growth and poor germination and necessitated considerable replanting. Cool weather through large portions of the belt, deficient moisture in

many western localities, and too much rain in the Carolinas were retarding factors early in the summer. Later in the summer, conditions were fairly favorable in the eastern part of the belt, but drought in Texas caused much deterioration of the crop in that state. During September the weather was rather unfavorable, but October weather was generally favorable. Killing frosts came early, from October 9th to 13th, doing considerable damage to unopened bolls in Oklahoma. Arkansas, and Tennessee, where the crop was two weeks or more late. The crop was not seriously injured by cotton pests. Owing to the extremely cold weather in the Spring and the general lateness of the planting season, the boll weevil was set back considerably. The trade, however, was alarmed by the discovery of the pink bollworm in Texas, and vigorous repressive methods were immediately undertaken. acreage harvested was 33,841,000. The average yield per acre was very low, being only 159.7 pounds. The erop was the third short one in succession, aggregating only 11,248,242 running bales, counting round as half bales, exclusive of linters. Linters totalled 1.096,422 bales, making a total crop, including linters, of 12,344,664 bales.

1918. The acreage planted in 1918 was of almost record size, 37,207,000 acres being under cultivation at the end of June. Weather conditions during the Spring varied greatly. At first they were fairly favorable, but later excessive rains and low temperatures interfered with planting, germination, and growth. In the late Spring and early Summer, beneficial showers and warm temperatures produced a rapid advance of the crop, with the result that at the end of June the outlook was very promising. Beginning with July, a severe drought, accompanied by high temperatures, resulted in pronounced deterioration of the crop in the western part of the belt. In the eastern section, fairly satisfactory weather prevailed during much of the season, and consequently the crop continued in a much better condition in the east than in the west. In September, rainfall was only light to moderate, and it was generally too cool for satisfactory development of a top crop. However, during October, high temperatures, ample rainfall, and absence of frost damage stimulated further growth, with the result that over large sections the top crop came out better than expected. Continuing favorable weather during November brought much late cotton to maturity. The boll weevil did comparatively little damage during 1918. The great drought prevented the normal abundance of this pest, and 46,000 square miles previously infested were cleared of the pest. The acreage harvested was 36,008,000. The average yield per acre was lower than in any previous year back to 1909, being only 155.9 pounds. The crop was the fourth short one in succession, aggregating only 11,906,480 running bales, counting round as half bales, exclusive of linters. Linters totalled 910,236 bales, making a total crop, including linters, of 12,816,716 bales.

- 1919. The acreage planted in 1919 was about the average for the few years immediately preceding, the area under cultivation at the end of June being 35,133,000 acres. Weather conditions during the Spring were decidedly unfavorable. Frequent rains in March delayed preparation of the soil and planting, cool weather in April retarded germination and growth, frost late in April damaged the plant in the Carolinas, while frequent rains and persistently cool weather during May continued to affect the cotton adversely in most sections of the belt. The eastern section suffered the least, and there the condition of the crop at the end of May was fairly good, but in most of the western portions of the belt the crop was in very poor condition. Similar conditions continued through June, more particularly in the western and southern portions of the belt. In July the weather was more favorable in the west, the rainfall being much less than earlier in the season, but in the east there was too much rain, resulting in rank growth of stalk. Weather conditions caused much damage by insect pests. During August the weather was fairly favorable in most sections and the crop made moderate progress, but at the end of the month the situation was unsatisfactory over large sections of the belt. There was a great variety of weather in different sections during September, resulting in good progress in some states and deterioration elsewhere. October was decidedly unfavorable, persistent rains resulting in bolls decaying, seed sprouting, and discoloration of open cotton. The rains continued well into November. Extensive killing frost occurred in the Gulf states about the middle of November. Boll weevil injury during 1919 was decidedly variable in its intensity, but in the country as a whole was comparatively light. The acreage harvested was 33,566,000. average yield per acre was low, being only 161.5 pounds. The crop was the fifth short one in succession, totalling only 11,325,532 running bales, counting round as half bales, exclusive of linters. Linters totalled 595,093 bales, making the total crop, including linters, 11,920,625 bales.
- 1920. The acreage devoted to cotton in 1920 was at first reported by the Department of Agriculture to be 35,504,000 acres, but the estimate was later increased to 36,383,000 acres. The planting season was very late and unpropitious, due to low temperatures and heavy rains, and the crop got a poor start. During May, torrential downpours produced flood conditions in the states bordering the Mississippi. The heavy precipitation resulted in slow germination of the young plants and caused grass and weeds to spring up so quickly that the farmers.

handicapped by the shortage of labor, were unable to cope with them, and much replanting was necessary. The very unsatisfactory situation was reflected in the report issued by the Department of Agriculture as of May 25th, in which the condition percentage was given as 62.4, compared with a ten-year average of 78.7. The prospect was for another short crop, the sixth in succession. During July, however, the weather conditions changed completely. Higher temperatures and plenty of sunshine resulted in the most remarkable recovery of the crop ever recorded. The forecasts issued by the Department of Agriculture were increased from 11.450,000 equivalent-500-pound bales as of June 25th, to 12,519,000 as of July 25th, and 12,783,000 as of August 25th. During the latter part of August and the early part of September, heavy rains again caused damage, and estimates of the crop were reduced somewhat. were many reports that the plants were failing to take on fruit, and that the boll weevil was unusually active. During the latter part of September, and through the harvesting season of October and November, however, weather conditions were generally very favorable to the maturity of the crop, and to planting and ginning. The result was that much cotton was added at the very end of the season. The December estimate was 12,987,000, and the final ginning report showed an actual crop of 13,365,754 equivalent-500-pound bales. The crop in running bales was 13.197.775. This was the largest crop since that of 1914.

PRODUCTION OF COTTON, EXCLUSIVE OF LINTERS, IN THE UNITED STATES, BY STATES

Running Bales, Counting Round as Half Bales

(From statistics compiled by United States Bureau of the Census)

10:01	070,721 104,833 1,177,035 177,035 19,194 1,446,577 388,025 897,733 74,33 74,33 74,33 11,287,080 1,287,080 1,287,080 313,747 4,130,197 4,130,197
6161	716,655 78,472 86,7177 50,087 1,07,317 1,07,373 303,035 95,007 62,007 62,007 63,007 1,002,178 1,002,178 1,002,178 1,002,178 2,006,335 2,006,335 2,3,076 1,035
8161	789,265 54,315 651,118 71,471 71,47,800 582,608 11,103,122 59,797 619,338 585,49 11,581,726 317,602 317,602 317,602 55,533 65,228
2161	520,906 21,140 95,144 95,144 95,174 1,885,954 80,974 80,974 86,056 95,056 3,041,726 3,041,726 3,041,726 5,058
9101	552,679 1,102,671 43,004 50,979 1,852,104 441,121 80,100 60,100 60,100 603,672 813,410 970,75 37,804 37,8
1015	1,025,818 ** 789,83 28,586 55,354 1,937,730 336,813 936,813 45,549 45,549 45,549 45,549 46,542 3,068,852 16,357 6,962
101	**************************************
1913	1,483,669 1,038,203 22,411 66,700 2,346,237 4,30,865 1,251,841 63,701 837,995 842,499 1,418,704 3,60,786 3,773,024 3,60,780 3,773,024 3,60,780 3,773,024 3,60,780 3,773,024
101	1,328,20,7  *  7,034  58,833  1,812,778  374,703  1,004,376  53,538  900,351  1,005,100  1,224,245  207,430  4,645,300  25,400
1101	1,005,284 008,014 0,817 04,477 2,704,205 380,820 1,100,000 1,120,270 1,001,138 1,002,140 1,002,140 1,002,152 1,002,152 1,003,004
STATE	Mabama Arizona Arizona Arkansas California Florida. Georgia Louisianna Miss'ssippi Miss'ssippi Miss surf North Carolina Oklahoma South Carolina Tennessee Texas Virginia All other states

\* Included in all ether states.

Total .

15.555.373 13.488,539 13.982,811 15.005,840 11.008,173 11.363,915 11.46,480 11.906,480 11.325,532 13.107,775

# PRODUCTION OF COTTON AND LINTERS IN THE UNITED STATES

(From statistics compiled by United States Bureau of the Census)

	COTTON EXCLUSIVE OF LINTERS		Linti	ERS	Corton Is Lint	
Growth Year	Running Bales Counting Round as Half Bales	Equivalent 500-Pound Bales Gross Weight	Running Bales	Equivalent 500-Pound Bales Gross Weight	Running Bales Counting Round as Half Bales	Equivalent 500-Pound Bales Gross Weight
1900 .	10,102,102	10,123,027	143,500	143,500	10,245,602	10,266,527
1901 .	9,582,520	9,509,745	166,026	166,026	9,748,546	9.675,771
1902 .	10,588,250	10,630,945	106,223	196,223	10,784,473	10,827,168
1903 .	9,819,969	9,851,129	195,752	194,486	10,015,721	10,045,615
1904 .	13,451,337	13,438,012	245,973	241,042	13,607,310	13,679,954
1905 .	10,495,105	10,575,017	230,497	229,539	10,725,602	10,804,556
1906 .	12,983,201	13,273,809	322,064	321,689	13,305,265	13,595,498
1907 .	11,057,822	11,107,170	268,060	268,282	11,325,882	11,375,461
1908 .	13,086,005	13,241,700	346,126	345,507	13,432,131	13,587,306
1000 .	10,072,731	10,004,949	313,478	310,433	10,386,209	10,315,382
1910 .	11,568,334	11,608,616	397,628	397,072	11,965,962	12,005,688
1911 .	15,553,073	15,692,701	556,276	557,575	16,109,349	16,250,276
1912 .	13,488,539	13,703,421	602,324	600,594	14,090,863	14,313,015
1913 .	13,982,811	14,156,486	631,153	638,881	14,613,964	14,795,367
1914 .	15,905,840	16,134,930	832,401	856,900	16,738,241	16,991,830
1915 .	11,068,173	11,191,820	944,640	931,141	12,012,813	12,122,961
1916 .	11,363,915	11,449,930	1,300,163	1,330,714	12,664,078	12,780,644
1917 .	11,248,242	11,302,375	1,096,422	1,125,719	12,344,664	12,428,094
1918 .	11,906,480	12,040,532	910,236	929,516	12,816,716	12,970,048
1919 .	11,325,532	11,420,763	595.093	007,009	11,920,625	12,028,732
1020 .	13,107,775	13,365,754	-	_	-	_

# SUMMARY SHOWING COMMERCIAL CROPS OF AMERICAN COTTON

In Running Bales, including Linters (Compiled by New Orleans Cotton Exchange)

	1917-18	1012-10	1019-20
Port receipts	6,400,129	0,735,898	7,299,667
Overland to mills	1,660,057	1,528,262	1,674,828
Southern consumption	4,303,743	3,533,777	3,691,005
	12.378.020	11,707,937	12,005,500
Less taken by Southern mills from ports	471.050	158,284	222,320
Total crops	11,000,073	11,639,653	12,443,180

# COMMERCIAL CROPS OF COTTON OF THE UNITED STATES, FOR YEARS ENDING JULY 31ST

(Compiled by the New Orleans Cotton Exchange)

States	1915-10	1916-17	1017-18	1018-10	1)19-20
Alabama	1,255,000	659,000	521,000	756,000	891,000
Arkansas	847,000	1,228,000	1,004,000	914,000	899,000
Florida	60,000	60,000	50,000	34,000	20,000
Georgia	2,320,000	2,164,000	1,980,000	2,029,000	2,037,000
Louisiana	403,000	496,000	665,000	541,000	329,000
Oklahoma	806,000	905,000	1,016,000	590,000	825,000
Mississippi	1,100,000	924,000	979,000	1,154,000	1,046,000
North Carolina, etc.* .	893,000	827,000	717,000	908,000	1,006,000
South Carolina	1,370,000	1,127,000	1,205,000	1,491,000	1,743,000
Tennessee, etc.**	510,000	610,000	400,000	543,000	550,000
Texas	3,374,000	3,941,000	3,220,000	2,680,000	3,097,000
Total Crop	12,938,000	12,041,000	11,907,000	11,040,000	12,443,000

<sup>\*</sup> Including Virginia and Kentucky. \*\* Including Missouri, California, etc.

### PRODUCTION OF SEA ISLAND COTTON

### Running Bales

(Compiled by United States Bureau of the Census)

Year	Florida	Georgia	South Carolina	Total	Average Gross Weight of Bale (Pounds)
1910	29,417	47,935	13,016	90,368	393-3
1911	41,270	72,904	5,119	119,293	399.7
1912	22,334	43,736	7,707	73,777	381.9
1913	25,587	43,305	8,671	77,563	384.7
1914	33,662	42,395	5,597	81,654	395.5
1915	28,094	57,572	6,178	91,844	387.5
1916	36,092	77,981	3,486	117,559	395.6
1917	37,327	47,979	7,313	92,619	388.6
1918	20,571	21,279	10,358	52,208	391.7
1919	2,787	684	3,445	6,916	362.1
1920	_	-	-	1,725	_

# PRODUCTION OF EXTRA STAPLE COTTON IN THE UNITED STATES

It is impossible to compile statistics as to extra staple cotton production which would be accepted without question by all sections of the trade, due principally to the fact that there is a large quantity of cotton produced which some cotton experts would call 1½" and therefore extra staple, while others would call it only 1½" and therefore short staple. Estimates of the extra staple crop, exclusive of Sea Islands and American-Egyptians, range all the way from 600,000 to 1,300,000 bales, in normal years. The estimates of the United States Department of Agriculture for the four years from 1016 to 1010 inclusive are given below. It is evident from the large totals that these estimates are based on a relatively low standard of staple classification. It should be noted that these statistics are exclusive of Sea Island and American-Egyptian cotton.

										15 TO 11 INC	H Inclusive	
		TA	TI	ES					1016	1017	1018	1010
Arkansas									178,000	200,000	201,000	136,000
California									13,000	13,000	0,000	10,000
Louisiana									27,000	23,000	22,000	7,000
Mississippi									284,000	404,000	470,000	207,000
Oklahoma									00,000	155,000	55,000	75,000
South Carolina .									73,000	106,000	122,000	02,000
Texas									180,000	222,000	180,000	181,000
All other States '	*								95,000	81,000	114,000	56,000
Total									046,000	1,213,000	1,182,000	854,000
										OVER I	4 Inch	
Arkansas									15,000	25,000	26,000	30,000
Louisiana									1,000	3,000	2,000	1,000
Mississippi									24,000	45,000	00,000	42,000
Oklahoma									-	8,000	0,000	2,000
South Carolina .									11,000	36,000	41,000	24,000
Texas									_	15,000	5,000	(),000
All other States	† .								8,000	0,000	31,000	8,000
Total					_	-			02,000	141,000	177,000	113,000

<sup>\*</sup> Includes Alabama, Arizona, Florida, Georgia, Missouri, North Carolina, and Tennessee.

### ACREAGE AND CROPS OF AMERICAN-EGYPTIAN COTTON

Crops in 500-Pound Bales

(From statistics compiled by United States Bureau of the Census)

Ye	ar								Acreage Planted	Crop
19	I 2								520	375
19	13								3,500	2,135
10	14								12,000	6,187
19	15								2,330	1,005
19	16								5,477	3,331
19	17								33,000	15,966
19	18								80,000	40,343
19	19								90,000	42,374
10	20								250,000	91,905

Note.—1920 Statistics of acreage are preliminary est mater.

<sup>†</sup> Includes California, Florida, Georgia, North Carolina, and Tennessee.

# COTTON GINNED TO SPECIFIED DATES AND THROUGHOUT THE SEASON

Quantities are given in running bales, except that round bales are counted as half bales. Linters are not included.

(Compiled by United States Bureau of the Census)

	YEAR OF	VEAR OF GROWTH				
1912 1913 1914	\$161 +1	9161	2161	8161	6161	1920
777,1297 739,884 709,099 480,317 463,883 850,668 614,787 1,038,078	5,317 463,883	830,668	614,787	1,038,078	142,625	367.211
3,007,271 3,246,655 3,303,752	3,752 2,003,829	2,003,829 4,081,989 2,511,658	2,511,658	3,770,611		2,243,030
6,874,206 6,973,518 7,010,747 5,708,730 7,303,183 5,573,606 6,811,351	0,747 5,708,730	7,303,183	5,573,606	6,811,351	4,020,104	5,712,057
8,869,222 8,830,396 9,826,912 7,378,886 8,623,893 7,185,178 7,777,159	5,912 7,378,886	8,623,893	7,185,178	7,777,159	6,305,054	7,471,352
11,313,236 10,290,646 10,444,529 11,668,240 8,771,275 9,615,003 8,571,115 8,706,420 7,604,320 8,020,776	3,240 8,771,275	9,615,003	8,571,115	8,706,420	7,604,320	8,020,776
12,816,807 11,854,541 12,088,412 13,073,386 9,703,612 10,352,031 9,713,529 9,571,414	3,386 9,703,612	10,352,031	9,713,529	0,571,414	8,844,368 10,144,021	10,111,01
2,439,030 12,927,428 13,97;	2,229 10,306,300	10,838,799	10,131,594	10,281,139	9,396,646	10,878,265
2,907,405 13,347,721 14,445	3,146 10,636,778	164,680,11	10,434,852	10,773,863	10,008,020	11,559,230
3,088,930 13,582,036 14,913	5,850 10,751,990	11,137,712	10,570,733	11,048,652	10,307,120	12,016,465
3,488,539 13,982,811 15,003	5,840 11,068,173	11,363,915	11,248,242	11,906,480	11,325,532	13,197,775
2.439,030 12,027,428 13.07; 2,007,405 13,347,721 14,44; 3,088,030 13,582,036 14,91; 3,488,530 13,982,811 15,002	2,229 10,30 3,146 10,63 5,850 10,73 5,840 11,00	56,309 51,990 51,990 58,173	56,360 10,838,790 56,778 11,039,401 51,990 11,137,712 86,173 11,363,915	56,359 10,838,799 10,131,594 56,778 11,039,491 10,434,852 51,990 11,137,712 10,570,733 58,173 11,363,915 11,248,242	56,300 10,838,790 10,131,504 10,281,139 56,773 11,039,491 10,434,852 10,775,863 51,090 11,137,712 10,570,733 11,048,652 78,173 11,363,915 11,248,242 11,006,480	13.770.727 12.439.930 12.027,428 13.072,229 10,306,300 10,838,790 10,131,594 10,281,139 9,396,646 10,878,265 14,317.002 12,439,030 12,044,51146 10,636,778 11,039,491 10,434,852 10,773,863 10,008,920 11,559,230 14,515,709 13,688,930 13,582,036 14,915,850 10,751,990 11,137,712 10,570,733 11,048,652 10,307,120 12,016,465 14,515,539 13,982,811 15,905,840 11,068,173 11,363,915 11,248,242 11,906,480 11,325,532 13,107,775

86.3

90.5

02.8

83.0

88.4

0.10

# PER CENT. OF TOTAL COTTON GINNED TO SPECIFIED DATES

(Compiled by United States Bureau of the Census)

YEAR OF GROWTH

PER CENT. GINNED TO											
GINNED TO	19	10	1011	1912	1913	1014	1915	1916	1017	1918	1010
September 1	1 3	;. I	5.0	5.4	5.7	3.0	4.2	7.5	5.5	8.7	1.3
September 25	3 20	0.0	23.6	22.3	23.2	21.3	26.2	35.9	22.3	31.7	16.2
October 18	3 46	.9	49.9	51.0	49.9	47.9	51.6	64.3	49.6	57.2	43.5
November 1	r 63	·5	64.1	65.8	63.2	61.8	66.7	75.9	63.9	65.3	55.7
November 1.	75	.9	72.7	76.4	74.7	73-4	79.2	84.6	76.2	73.1	67.1
December	87	.7	82.4	87.9	86.5	82.2	87.7	91.1	86.4	80.4	78.1

92.5

95.5 90.8

87.8

93.8

93.1

06.1

97.1

95.4

97.1

08.0

00.1

02.8

04.0

### AVERAGE GRADES OF RECENT COTTON CROPS

Henry G. Hester, Secretary of the New Orleans Cotton Exchange, computes the average grades of recent American cotton crops to have been as follows:—

1914-15, Middling.

December 13

January 16

January

92.5

95.8

97.3

88.5

Q2.I

92.2

93.3 97.0 97.1

95.7

1915-16, Middling to Strict Middling.

1916-17, Middling to Strict Middling.

1917-18, Middling.

1918-19, Barely Middling.

1919-20, Strict Low Middling.

# ESTIMATED QUANTITY OF COTTON SEED PRODUCED, QUANTITY OF COTTON SEED CRUSHED, AND QUANTITIES AND VALUES OF CRUDE PRODUCTS OBTAINED

Statistics of the quantity of seed produced relate to the growth year. Those of the quantity crushed and of the quantities and values of products obtained relate to the year beginning August 1st.

(From statistics compiled by United States Bureau of the Census)

y Value rs Value and of Linters	576 %0,250,000 590 5,150,000		345 45,193,000 802 26,604,000	500 22,228,000 146 12,336,000
Quantity of Linters s (500-Pound Bales)	,000 379,576 ,000 533,000		12,349,000 039,577 13,994,000 1,273,345 18,878,000 1,080,802	,000 889,500
Value of Hulls	\$44,660,000 1,375,000 \$11,370,000 49,720,000 1,612,000 9,890,000			00 17,917,000
Quantity of Hulls (Fons)	44,660,000 I,375,000 49,720,000 I,642,000	59,810,000 1,400,000 57,740,000 1,677,000	53,800,000 1,220,000 74,586,000 969,000 97,352,000 996,000	116,119,000 1,137,000 119,039,000 1,143,000
Value of Cake & Meal				
Quantity of Cake & Meal (Tons)	\$80,430,000 1,792,000 66,580,000 2,151,000	St, 020,000 2, 220,000 S0,540,000 2,648,000	57,940,000 1,923,000 153,419,000 2,225,000 217,902,000 2,068,000	227,316,000 2,170,000 209,668,000 1,817,000
Value of Oil		81,020,00 81,020,00 80,540,00	57,940,00 153,419,00 217,902,00	
Quantity of Oil (Gallons)	131,340,000	159,670,000 193,730,000 152,880,000 229,260,000	180,260,000 107,110,000 287,192,000 187,688,000 360,736,000 174,996,000	383,580,000 176,711,000 352,138,000 161,529,000
Total Value Products	4,001,000 \$121,210,000 167,070,000 4,021,073 131,340,000 201,650,000			
Cotton Seed Crushed (Tons)	4,106,000	4,847,628 5,779,665	4,202,313 4,479,176 4,251,680	4,478,508
Cotton Seed Produced (Tons)			4,992,000 5,113,000 5,040,000	
	. 0101	1913 . 1914 .	1915 . 1916 . 1917 .	1918.

# ACTIVE AND IDLE GINNERIES IN THE UNITED STATES AND AVERAGE NUMBER OF RUNNING BALES GINNED PER ACTIVE ESTABLISHMENT

(Compiled by United States Bureau of the Census)

					-
	Growth Year	Total Ginneries	Active Ginneries	Idle Ginneries	Bales Ginned Per Establishment
1010		29,380	26,234	3,146	112
1910			,		443
1911		29,225	26,349	2,876	592
1912		28,358	25,279	3,079	535
1913		27,649	24,749	2,000	567
1914		27,339	24,547	2,792	648
1915		26,721	23,162	3,559	478
1916		25,999	21,624	4,375	526
1917		24,272	20,351	3,921	553
1918		23,439	19,259	4,180	618
1919		22,418	18,815	3,603	(102
1020		-	18.426	_	

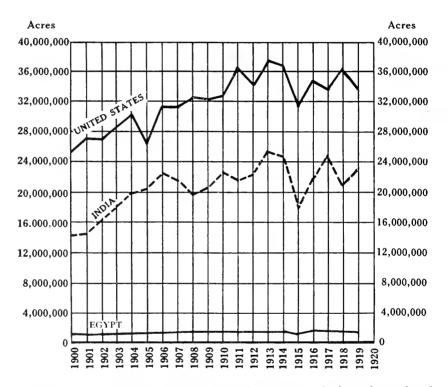
# ESTIMATED VALUES OF COTTON AND COTTON SEED PRODUCED AND OF COTTON EXPORTED

(From statistics compiled by United States Bureau of the Census)

Growth Year	Value of Cotton Produced	Value of Cotton Seed Produced	Total Value of Cotton Crop	Value of Cotton Exported*
	 \$688,350,000	\$123,740,000	\$812,090,000	\$450,447,243
	820,320,000	142,860,000	963,180,000	585,318,869
	749,890,000	119,800,000	869,690,000	505,849,271
	786,800,000	117,330,000	904,130,000	547,357,195
	 885,350,000	141,350,000	1,026,700,000	(110,475,301
	 591,130,000	128,950,000	720,080,000	370,217,972
	 027,040,000	167,000,000	795,840,000	374.180,247
	 994,060,000	250,070,000	1,253,130,000	543,100,542
	 1,532,690,000	333,550,000	1,866,240,000	. 665,024,655
	 1,737,710,000	349,400,000	2,087,200,000	873,579,669
	 2,030,050,000	340,470,000	2,371,430,000	1,381,707,502
		Grewth Year Cotton Produced	Growth Year Cotton Seed Produced Produced Produced Produced Produced Produced Produced  S688,350,000 \$123,740,000 \$20,320,000 142,800,000 740,800,000 110,800,000 780,800,000 117,330,000 885,350,000 141,350,000 591,130,000 128,050,000 027,040,000 107,000,000 994,000,000 250,070,000 1,532,000,000 333,550,000 1,737,710,000 340,400,000	Growth Year Cotton Produced Cotton Seed Produced Crop Cotton Seed Produced Crop Crop Crop Seed Produced Crop Crop Seed Produced Crop Seed Produced Crop Seed Produced Crop Seed Produced Crop Seed Seed Seed Seed Seed Seed Seed See

<sup>\*</sup> Export data relate to years ending June 30th, during which crops referred to were marketed.

# COTTON ACREAGE OF EGYPT, INDIA, AND THE UNITED STATES



The above chart is based on the statistics on the next page. It shows the number of acres devoted to cotton in Egypt, India, and the United States, as compiled by the United States Bureau of the Census.

# COTTON ACREAGE OF EGYPT, INDIA, AND THE UNITED STATES

(From statistics compiled by	the	United	States	Bureau of	the Census)
------------------------------	-----	--------	--------	-----------	-------------

Year	Egypt	India	United States
1900 ,	1,277,000	14,231,150	25,758,139
1901	1,207,000	14,506,205	27,220,414
1902	1,324,000	16,581,046	27,114,103
1903	1,383,000	18,025,000	28,016,893
1904 .	1,401,000	10,018,000	30,053,730
1905	1,626,000	20,401,000	26,117,153
1906	1,564,000	22,488,000	31,374,000
1907	1,000,4000	21,030,000	31,311,000
1908 .	1,703,000	000.000,01	32,444,000
1909 .	1,010,000	20,545,000	32,044,000
1910	1,064,000	22,596,000	32,403,000
1911 .	1,776,000	21,615,000	30,045,000
1912 .	1,787,000	22,028,000	34,283,000
1013	1,780,000	25,020,000	37,089,000
1014 .	1,822,000	24,595,000	36,832,000
1915 .	1,231,000	17,746,000	31,412,000
1916	1,718,000	21,745,000	34,985,000
1917 .	1,741,000	25,188,000	33,841,000
1918 .	1,413,000	21,038,000	36,008,000
1010	1.033.000	23.003.000	33,506,000

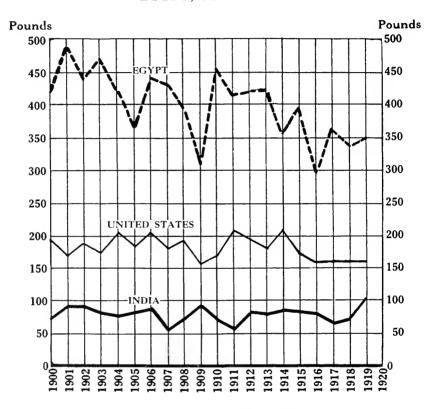
# COTTON PRODUCTION, POUNDS PER ACRE, BY STATES

(Compiled by United States Department of Agriculture)

		1011	1912	1913	1914	1915	1916	1917	1918	1010	1920
United States		208	191	182	200	170	157	160	100	101	171
Alabama .		204	172	190	200	146	79	125	140	1 2 2	111
Arkansas .		190	190	205	196	180	200	170	158	155	104
California .		300	450	500	500	380	400	242	270	268	240
Florida .		130	113	150	175	120	105	100	85	74	86
Georgia		240	150	208	230	180	105	173	100	152	135
Louisiana .		170	193	170	105	165	170	210	167	9,3	126
Mississippi .		172	173	204	195	167	125	155	187	100	140
Missouri		360	260	286	270	240	225	190	200	257	275
North Carolina		315	267	239	200	200	215	104	268	200	204
Oklahoma		100	183	132	212	162	154	105	() 2	105	225
South Carolina		280	200	235	255	215	100	208	250	240	254
Tennessee		257	160	210	200	188	200	130	175	105	180
Texas		186	206	150	184	147	157	1.35	115	140	100
Virginia		330	250	240	205	225	310	180	270	255	230

Note.—Data for 1920 are preliminary estimates.

## YIELD OF COTTON PER ACRE IN THE UNITED STATES, EGYPT, AND INDIA



The above chart is based on the statistics on the next page. It shows the number of pounds of cotton produced per acre in the United States, Egypt, and India. The statistics for Egypt and India were compiled by the United States Bureau of the Census. Those for the United States were compiled by the United States Department of Agriculture.

# YIELD OF COTTON PER ACRE IN THE UNITED STATES, EGYPT, AND INDIA

### Expressed In Pounds

(Statistics for Egypt and India were compiled by the United States Bureau of the Census; those for the United States were compiled by the United States Department of Agriculture)

Year	Ur	nited States Egypt	India
1900	 	104 422	70
1901	 	170 487	0.1
1902	 	187 437	90
1903	 	174 466	79
1904	 	206 420	77
1905	 	187 363	83
1906	 	202 440	88
1907	 	179 431	58
1908	 	195 393	7.3
1900	 	154 300	0.2
1010	 	171 453	68
1011	 	208 412	50
1912	 	101 417	84
1913	 	182 425	81
1914	 	200 353	85
1915	 	170 387	84
1916	 	157 295	83
1917	 	160 350	64
1918	 	160 338	76
1919	 	161 349	101

# CONDITION ESTIMATES OF THE 1920 EGYPTIAN COTTON CROP

(As reported by the Egyptian Ministry of Agriculture)

In the system of notation adopted, 100 is taken to represent the average crop of each division of the country. The figures given below represent the prospective final condition of the crop at the time of report in relation to each divisional average, assuming the absence of any extraordinary circumstances in the future history of the crop; they have no relation to the area under cultivation.

Lower Egypt	${\rm Middle\ Egypt\ }^*$	Upper Egypt†
90	QQ	100
	100	100
98	102	100
100	100	9.3
00	0.3	98
82	88	94
	00 04 08 100	04 100 08 102 100 100 00 03

<sup>\*</sup> El Giza-El Minya.

# ACREAGE OF COTTON PLANTED, ACREAGE ABANDONED, AND ACREAGE HARVESTED IN THE UNITED STATES\*

(Revised estimates of United States Department of Agriculture)

	Acreage Planted	Acreage Abandoned	Acreage Harvested
1010	33,418,000	1,015,000	32,403,000
1011	36,681,000	636,000	36,045,000
1012	34,766,000	483,000	34,283,000
1013	37,458,000	369,000	37,089,000
1914	37,406,000	574,000	36,832,000
1915 .	32,107,000	695,000	31,412,000
1916	36,052,000	1,067,000	34,985,000
1917 .	34,925,000	1,084,000	33,841,000
1918 .	37,207,000	1,199,000	36,008,000
1919 .	35,133,000	1,567,000	33,566,000
1020	36,383,000	-	-

<sup>\*</sup> Acreage planted is computed as of June 30 each year.

## ACREAGE OF COTTON HARVESTED IN THE UNITED STATES

(United States Department of Agriculture)

						Thous	ANDS OF	Acres				
STATE		1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Total		32,403	36,045	34,283	37,089	36,832	31,412	34,985	33,841	36,008	33,566	36,383
Alabama Arizona		3,560	4,017	3,730	3,760	4,007	3,340	3,225	1,977 41	2,570 95	2,79I 107	2,842 237
Arkansas		2,238	2,363	1,991	2,502	2,480	2,170	2,600	2,740	2,991	2,725	2,862
California .		0	1.2	0	14	47	39	52	136	173†	185†	298†
Florida		257	308	224	188	221	193	191	183	167	103	IOI
Georgia		4,873	5,504	5,335	5,318	5,433	4,825	5,277	5,195	5,341	5,220	4,958
Louisiana .		975	1,075	929	1,244	1,200	990	1,250	1,454	1,683	1,527	1,442
Mississippi		3,317	3,340	2,889	3,067	3,054	2,735	3,110	2,788	3,138	2,848	3,024
Missouri	,	100	120	103	112	145	96	133	153	148	125	148
North Carolina		1,478	1,624	1,545	1.576	1,527	1,282	1,451	1,515	1,000	1,409	1,518
Oklahoma		2,204	3,050	2,665	3,000	2,847	1,805	2,502	2,783	2,998	2,424	2,765
South Carolina		2,534	2,800	2,695	2,700	2,861	2,510	2,780	2,837	3,001	2,835	2,877
Tennessee		765	837	783	865	915	772	887	882	002	758	824
Texas		10,000	10,943	11,338	12,507	11,031	10,510	11,400	11,002	11,233	10,476	12,576
Virginia		33	4.3	47	47	45	34	42	50	44	42	39
All other		_		_	_	20	15	25	15	1.2	10	2 I

<sup>\*</sup>Included in all other states. † Lower California (149,000 acres in 1920, 85,000 in 1919 and 88,000 in 1918) included in California figures but excluded from United States totals.

Note.—The data for 1920 relate to area planted.

# OF AGRICULTURE, COMPARED WITH ACTUAL YIELD AND PRODUCTION, AND AMOUNT FORECASTS OF AMERICAN COTTON CROPS ISSUED BY UNITED STATES DEPARTMENT OF VARIATION OF FORECASTS FROM ACTUAL YIELD AND PRODUCTION

(Compiled by the Industrial Service Department of the Merchants National Bank of Boston)

# FORECASTS OF YIELD PER ACRE

			FORECAST	IS OF VIELE	Forecasts of Yield Per Acre (Pounds)	(Pounds)		Actual	PERCENT	PERCENTAGE OF VARIATION OF FORECASTS FROM ACTUAL VIELD	IATION OF P	ORECVSTS	from Actua	т Ујего	
	-	May 25	June 25	July 25	Aug. 25	Sept. 25	Dec. Est	Pounds	$_{\rm May~25}$	June 25	July 25	Aug. 25	Sept. 25 Dec. Est.	Dec. Est.	
1020			155.0	170.4	0.+71		170.8			ı	I	1	1	1	
1010		171.3	150.4	156.8	159.8	158.0	158.2	161.5	+0	-3	<u>.</u>	_ I		-	
1918 .		1	8.001	177.3	145.2		155.0	159.6	ı	+28	+13	1	ī		
1017 .		102.5	162.5	0.001	174.6	168.3	155.7	159.7	+	+	+	0+	+	~	
1916		181.5	0.101	173.4	158.5		156.3	156.6	91+	+ 2.2	+	+			
1915		First	forecast	of yield p	er aere										
		3.5	ued as of	Sept. 25	Iss ued as of Sept. 25 1015	1.68.1	172.5	170.3					ī	<del>-</del>	
1014							207.0	200.2						I	
1913							183.4	182.0						+1	
1912							10,3.2	190.9						+1	_
1101							208.2	207.7						1	
1010							1,071	170.7							

# FORECASTS OF TOTAL CROP 500-pound gross bales, exclusive of linters

			For	Forecasts of Crops	Sdi		Actual	AMOUNT OF	AMOUNT OF VARIATION OF FORECASTS FROM ACTUAL PRODUCTION	Forecasts fr	OM ACTUAL PR	ODUCTION
		June 25	Jaly 25	Aug. 25	Sept. 25	Dec. Est.	Production	June 25	July 25	Aug. 25	Sept. 25	Dec Est.
1020		000,051,11	12,510,000	12,783.000	12.123.000	000.780.51	13,365,754	1.015.754	ts2", ts	582,754	1,242.754	378,754
1019		10.080,000	10.010,000	11,230,000	10.696,000	11,030,000	11,420,763	134.703	-1,404.703	-100.763	-724.763	340,763
1018		15.325.000	13,610,000	11,137,000	11.818,000	11,700,000	12,040,532	+3,284,468	+1.578,408	903,532	-222,532	-340,532
1017		11.033,000	11,040,000	12,400,000	12,047,000	10,040,000	11,302,375	+330,025	+040,023	+1,190,625	+744,025	353.375
. 0161		1.1.200,000	12,916,000	000,008,11	11,637,000	11,511,000	11,449,930	+2.816,070	+1.400,070	+350,070	+187.070	+01,070
1915		1		1	10,050,000	11,101,000	11,191,820	,	ı	1	-241,820	-30,820
1914		ı	ı	1	1	15.060,000	16,134,930	j	,		ı	-168,030
1913		ı	ı		1	13,677,000	14,156,486	ı	ı	ı	ı	-470,486
1912	=	First monthly	v forecast male	Urirst monthly forecast madde by Depart ment of Agri-	nent of Agri-	13,820,000	13,703,421	First month	13,703,421 (First monthly forecast ma de by Depart ment of Agri-	le by Depart	ment of Agri-	+116,570
1011	5	ulture was t.b	culture was t hat of Sept. 2 5, 1915)	5, 1915)		11,885,000	15,692,701	ulture was t	15,692,701 culture was t hat of Sept 2 5, 1015)	5, 1015)		- So7.701
0101		,	,	,	1	11.426,000	919,809,11	ı	ı		1	-182.016

# CONDITION OF AMERICAN COTTON CROPS ON MAY 25TH

(As reported by the United States Department of Agriculture)

STATES	1910	1011	1912	1013	1914	1915	1916	1917	1918	1919	1920
Virginia	()0	93	89	83	83	88	89	7.5	89	89	7 I
North Carolina .	84	83	87	76	70	85	76	63	84	85	70
South Carolina .	78	80	83	68	7.2	80	65	70	80	78	68
Georgia	81	92	7.4	69	80	81	7.3	69	78	81	55
Florida	80	95	75	83	82	80	82	76	75	75	62
Alabama	83	91	74	75	85	78	76	61	78	78	58
Mississippi	82	86	7.2	81	87	82	83	66	86	73	65
Louisiana	76	91	69	81	82	76	82	74	85	74	7.2
Texas	83	88	86	84	65	79	78	7.4	82	76	60
Arkansas	81	87	73	85	79	84	87	64	85	68	61
Tennessee	86	83	74	87	80	85	86	6.3	90	64	60
Missouri	87	86	74	90	86	CO	87	73	79	70	64
Oklahoma	84	87	78	87	68	70	85	77	86	65	70
California	90	95	96	96	100	82	97	82	91	01	86
Arizona		-	***	_	_		_	-	90	-	80

United States . 82.0 87.8 78.0 79.1 74.3 80.0 77.5 69.5 82.3 75.6 62.4

## CONDITION OF AMERICAN COTTON CROPS ON JUNE 25TH

(As reported by the United States Department of Agriculture)

STATES	1010	1011	1013	1913	1011	1015	1916	1917	1018	1919	1920
Virginia	81	98	87	81	86	78	90	82	85	82	73
North Carolina .	7.2	89	83	70	82	79	76	67	91	83	74
South Carolina .	7.5	84	79	73	81	76	74	71	83	78	74
Georgia	78	94	7.2	7.4	83	79	80	00	80	7.2	63
Florida	82	96	76	85	86	78	83	79	79	57	63
Alabama	81	93	76	79	88	78	79	65	84	67	67
Mississippi	81	87	74	82	81	84	85	68	90	63	69
Louisiana	7.7	89	74	81	81	83	84	74	87	61	77
Texas	84	85	89	86	74	82	81	72	84	69	71
Arkansas	7.7	89	77	86	80	85	89	67	91	64	72
Tennessee	82	87	76	87	79	87	84	70	94	64	69
Missouri	80	90	75	88	93	86	74	75	93	60	7.2
Oklahoma	88	87	82	89	79	71	84	74	90	69	77
California	95	100	98	95	100	00	100	93	93	99	83
Arizona	-	-	-	_	-	_	-	87	96	93	80
United States .	So.7	88.2	80.4	81.8	79.6	80.3	81.1	70.3	85.8	70.0	70.7

# CONDITION OF AMERICAN COTTON CROPS ON JULY 25TH

(As reported by the United States Department of Agriculture)

States	1010	1011	1912	1013	101	1015	1010	1017	1018	1919	1020
Virginia	80	102	85	81	80	79	87	7.5	75	So	7-4
North Carolina .	7 I	87	80	77	86	78	70	65	87	70	77
South Carolina .	70	86	7.5	7.5	79	7.2	65	74	80	71	77
Georgia	70	95	68	70	82	70	68	(ig	77	07	68
Florida	70	95	7.5	82	86	78	0.2	80	70	50	04
Alabama	71	94	7.3	79	81	71	54	65	78	04	67
Mississippi	71	86	68	77	79	76	65	7.3	81	63	71
Louisiana	60	84	76	70	76	7.5	77	7.4	0.5	52	71
Texas	82	86	84	81	71	76	78	68	01	67	74
Arkansas	73	04	7.4	87	7.2	80	85	7 I	77	63	78
Tennessee	76	0.2	71	00	7.3	85	82	71	86	67	76
Missouri	72	96	75	86	75	83	80	78	93	67	81
Oklahoma	87	88	80	81	7.5	69	84	77	7.5	7.5	85
California	98	99	99	100	100	96	100	04	95	100	85
Arizona	_	-	_		-	~~	_	88	95	93	85
United States	75.5	80. I	70.5	70.0	76.1	75.1	7 2 2	70.3	726	67.1	71.1

# CONDITION OF AMERICAN COTTON CROPS ON AUGUST 25TH

(As reported by the United States Department of Agriculture)

States	1010	IOII	1912	1913	1014	1915	1910	1017	1018	1010	1020
Virginia	82	96	80	80	86	85	90	76	84	67	81
North Carolina .	76	76	75	78	82	76	65	00	77	70	79
South Carolina .	7.3	74	73	77	7.7	71	57	7.4	0.7	67	71
Georgia	71	81	70	70	81	00	62	68	00	55	58
Florida	7.4	85	73	81	83	70	58	65	(10	38	57
Alabama	7.2	80	75	7.2	77	65	45	65	()()	55	58
Mississippi	71	70	70	(i)	7.5	69	49	75	07	0.1	00
Louisiana	60	69	74	67	66	65	64	75	53	47	55
Texas	69	68	76	0.1	79	67	66	55	4.3	()1	67
Arkansas	78	78	77	7.2	7.5	7.2	71	70	5.2	05	75
Tennessee	78	88	70	80	7()	82	80	So	58	OQ	75
Missouri	78	88	78	7.2	7.2	81	80	83	00	75	8,3
Okłahoma	85	62	84	45	80	71	50	84	3.3	7 I	84
California	95	100	95	g6	98	93	0.2	00	0.2	98	80
Arizona	-	_	-				-	89	90	90	86
United States .	72.1	73.2	7.1.8	08.2	78.0	60.2	61.2	67.8	55.7	61.4	67.5

## CONDITION OF AMERICAN COTTON CROPS ON SEPTEMBER 25TH

(As reported by the United States Department of Agriculture)

States	1010	1011	1013	1913	1014	1915	1916	1017	1018	1010	1920
Virginia	78	87	70	75	80	80	85	69	84	64	72
North Carolina .	7.2	77	70	70	79	70	61	63	74	6 <b>1</b>	68
South Carolina .	70	73	68	71	72	63	53	67	65	61	62
Georgia	68	79	65	7.2	81	61	58	62	62	49	51
Florida	66	75	65	78	81	62	48	61	50	35	50
Alabama	67	73	68	67	78	57	36	55	63	45	49
Mississippi	63	62	63	63	68	62	40	63	64	52	50
Louisiana	51	66	69	60	67	60	56	69	52	38	47
Texas	63	7 I	75	63	70	57	63	53	44	52	6 <b>1</b>
Arkansas	68	70	68	63	69	63	65	68	50	60	65
Tennessee	73	77	68	68	70	71	68	65	59	64	66
Missouri	7.5	80	7.2	64	72	7.2	67	76	61	58	75
Oklahoma	70	60	69	42	80	63	56	62	33	72	70
California	90	100	90	100	96	95	93	80	90	95	78
Arizona	-	-	_	_	-		-	87	93	92	90
United States .	65.0	71.1	69.6	64.1	73.5	60.8	50.3	60.4	54-4	54-4	50.1

### CONDITION OF AMERICAN COTTON CROP ON REPORTING DATES IN 1920

(From statistics compiled by United States Department of Agriculture)

	May 25	June 25	July 25	August 25	Sept. 25
Virginia	7 I	7.3	74	81	72
North Carolina	70	74	77	79	68
South Carolina	68	7-4	77	71	62
Georgia	5.5	63	68	58	51
Florida .	6.2	63	64	57	50
Alabama	58	67	67	58	40
Mississippi	0.5	69	71	60	50
Louisiana .	7.2	77	7 I	55	47
Texas .	60	7 I	74	67	61
Arkansas	61	7.2	78	75	65
Tennessee .	60	69	76	75	66
Missouri .	04	7.2	81	83	75
Oklahoma .	70	77	85	84	70
California .	86	83	85	So	78
Arizona	80	80	85	86	90
New Mexico	_	80	_	-	-
United States	02.4	70.7	74.1	67.5	59.1

# DATES OF EARLIEST KILLING FROSTS IN AUTUMN IN THE COTTON BELT OF THE UNITED STATES DURING THE PAST SIX YEARS

(Compiled from Official Reports of the United States Weather Bureau)

	1015	1010	1017	1018	1010	1020
Name Caracas						
NORTH CAROLINA:	<b>N</b> 7 (					
Charlotte	Nov. 16	Nov. 16	Oct. 14	Nov. 13	Nov. 14	Oct. 30
Rockingham	Nov. 17	Nov. 15	Oct. 31	Nov. 24	Nov. 15	Oct. 29
Raleigh	Xov. 16	Nov. 10	Oct. 31	Nov. 24	Nov. 14	Nov. 13
Goldsboro	Nov. 4	Nov. 4	Oct. 31	Nov. 8	Nov. 14	Oct. 30
South Carolina:						
Charleston .	Dec. 14	Nov. 16	Nov. 25	Dec. 29	Dec. 15	Dec. 29
Columbia .	Zov. 16	Nov. 16	Nov. 3	Dec. 26	Nov. 15	Nov. 13
Georgia:						
Atlanta .	Nov. 16	Nov. 15	Oct. 24	Dec. 26	Nov. 14	Nov. 12
Augusta .	Nov. 16	Nov. 10	Oct. 25	Dec. 26	Nov. 15	Nov. 14
Savannah .	Xov. 30	Nov. 16	Oct. 25	Dec. 20	Dec. 16	Dec. 25
Columbus	Nov. 16	Nov. 15	Oct. 24	Dec. 26	Dec. 15	Oct. 30
Rome	Nov. 4	Oct. 22	Oct. 13	Nov. 14	Nov. 14	Oct. 29
ALABAMA:						
Eufaula	Nov. 16	Nov. 17	Oct. 25	Dec. 5	Dec. 16	Nov. 17
Mobile	None	Nov. 10	Dec. o	Dec. 26	Dec. 15	Nov. 17
Montgomery	Nov. 16	Nov. 16	Oct. 25	Dec. 2	Dec. 16	Nov. 17
Mississippi:						,
Vicksburg	Nov. 10	Nov. 15	Oct. 20	Nov. 24	Nov. 14	Nov. 13
Greenville	Oct. 10	Oct. 22	Oct. 13	Nov. 1	Nov. 13	Nov. 12
Louisiana:			· ·			
New Orleans .	None	Nov. 17	Dec. o	None	None	None
Shreveport	Nov. 15	Nov. 14	Oct. 24	Nov. 24	Nov. 13	Nov. 13
Texas:			·		.,	
Galveston	None	Dec. 15	Dec. 8	None	Dec. 10	None
Palestine	Dec. 3	Nov. 14	Oct. 30	Nov. 24	Xov. 14	Nov. 16
San Antonio	Dec. 20	Nov. 14	Oct. 30	Nov. 28	Dec. 10	Nov. 16
Fort Worth	Nov. 15	Nov. 13	Oct. 24	Nov. 22	Nov. 12	Nov. 12
Arkansas:						
Little Rock	Nov. 15	Nov. 14	Oct. 24	Nov. 23	Nov. 13	Nov. 12
Fort Smith	Nov. 15	Oct. 21	Oct. q	Nov. 1	Nov. 13	Nov. 3
Tennessee:			9			
Memphis	Nov. 15	Oct. 22	Oct. o	Nov. 24	Nov. 13	Nov. 12
Nashville	Oct. 10	Oct. 22	Oct. 11	Nov. 2	Nov. 13	Oct. 20
Chattanooga	Nov. 16	Nov. 14	Oct. 20	Nov. 25	Nov. 14	Nov. 15
Октанова:	1101.10	.1011.14		11013	-100.14	.101.15
Ardmore	Nov. 15	Oct. 20	Oct. 19	Nov. 24	Nov. 12	Nov. 12
Oklahoma	Nov. 15	Oct. 20	Oct. 19	Nov. 24 Nov. 22	Nov. 12	Nov. 11
	Nov. 15		Oct. 10	Nov. 22 Nov. 23	Nov. 12 Nov. 12	
Mangum	70v. 12	Oct. 20	OCT, 10	×01. 23	.NOV. 12	Nov. 2

## DATES OF EARLIEST KILLING FROSTS IN AUTUMN, LATEST KILLING FROSTS IN SPRING, AND AVERAGE DATES, FROM BEGINNING OF RECORD KEPT BY UNITED STATES WEATHER BUREAU TO MAY, 1920

	Years Recorded	Earliest Date in Autumn	Average Date in Autumn	Latest Date in Spring	Average Date in Spring
Virginia:					
Newport News	2 2	Oct. 3	Nov. 9	April 26	March 26
Norfolk	48	Oct. 15	Nov. 12	April 26	March 27
Richmond	24	Oct. 12	Nov. 3	April 26	April 2
NORTH CAROLINA:					
Greensboro	18	Oct. 11	Oct. 25	April 26	April 7
Raleigh	34	Oct. 8	Nov. 2	May 6	March 31
Wilmington	50	Oct. 16	Nov. 13	Мау 1	March 23
Charlotte	42	Oct. 8	Nov. 4	April 26	March 29
Monroe	25	Oct. 2	Oct. 19	May 10	April 14
SOUTH CAROLINA:					
Charleston	50	Nov. 8	Dec. 2	April 2	March 1
Columbia	42	Oct. 30	Nov. 8	April 17	March 22
Greenwood	24	Oct. 11	Nov. 4	April 17	March 22
Spartanburg	27	Sept. 24	Nov. 6	April 17	March 31
Greenville	20	Oct. 10	Nov. 7	April 24	April 8
Georgia:					
Macon	2.2	Oct. 11	Nov. 13	April 18	March 20
Athens	20	Oct. 11	Nov. 8	April 21	March 27
Augusta	47	Oct. 11	Nov. 7	April 17	March 24
Savannah	48	Oct. 21	Nov. 27	April 13	March 9
Rome	20	Oct. 11	Nov. 1	April 24	March 31
Columbus	24	Oct. 11	Nov. 17	April 26	March 6
Gainsville	20	Oct. 11	Nov. 3	April 24	March 31
Newman	25	Oct. 11	Nov. 8	April 26	March 25
Thomasville	26	Oct. 21	Nov. 18	April 26	March 6
FLORIDA:					
Gainesville	2.2	Nov. 10	Dec. 3	April 2	Feb. 26
Jacksonville	50	Nov. 12	Dec. 6	April 6	Feb. 16
Lake City	29	Nov. 7	Nov. 28	April 15	March 10
Pensacola	4 I	Oct. 27	Dec. 5	April 6	Feb. 23
Tallahassee	31	Nov. 4	Dec. 1	April 10	March 4
Tampa	30	Nov. 21	Jan. 3	$\Lambda_{ m Pril}$ 7	Jan. 26
Alabama:					
Anniston	15	Oct. 11	Oct. 30	April 25	April 2
Opelika	27	Oct. 21	Nov. 9	April 17	March 17
Montgomery	48	Oct. 21	Nov. 8	April 5	March 10
Selma	24	Oct. 13	Nov. 8	April 26	March 13
Eufaula	28	Oct. 21	Nov. 9	April 26	March 14
Mobile	50	Ост. 31	Nov. 30	April 6	Feb. 24
Decatur	26	Oct. 11	Oct. 15	April 26	$\Lambda \text{pril}_{[5]}$
Birmingham	26	Oct. 21	Nov. 5	April 17	March 19
Tuscaloosa	32	Oct. 21	Nov. 6	April 25	March 23
Thomasville	24	Oct. 21	Nov. 8	April 26	March 15
MISSISSIPPI:					
Yazoo City	27	Oct. 13	Nov. 2	April 25	March 28
Vicksburg	50	Oct. 20	Nov. 13	April 6	March 6
Meridian	31	Oct. 8	Nov. 2	April 25	March 17
Natchez	28	Oct. 20	Nov. 12	April 25	March o

# DATES OF EARLIEST KILLING FROSTS IN AUTUMN, LATEST KILLING FROSTS IN SPRING, AND AVERAGE DATES, ETC. (Continued).

	Years Recorded	Earliest Date in Autumn	Average Date in Autumn	Latest Date in Spring	Average Date in Spring
Mississippi (Continued):					
Greenville	30	Oct. 10	Oct. 31	April 26	March 18
Greenwood	2.2	Oct. 13	Oct. 27	April 26	March 19
Columbus	27	Oct. 11	Oct. 31	April 26	March 27
Louisiana:					
Baton Rouge	30	Oct. 14	Nov. 10	April 5	March 1
New Orleans	48	Nov. 11	Dec. 10	March 27	Feb. 3
Monroe	28	Oct. 10	Nov. 12	April 9	March 14
Natchez (see Miss.)					
Shreveport	2.2	Oct. 24	Nov. 11	April 9	March 4
Texas: Houston		Oct. 25	V	March 26	Feb. 20
Galveston	47	Oct. 25 Nov. 30	Nov. 25 Dec. 24	Feb. 25	Ian. 27
Corpus Christi	4.3	Xov. 20	Dec. 16	March 10	Feb. 21
Luling	34 30	Oct. 27	Nov. 10	April o	March 2
Cuero	20	Oct. 27	Nov. 23	April 5	Feb. 25
San Antonio	35	Oct. 30	Nov. 26	April 5	Feb. 23
El Paso	31	Oct. 27	Nov. 10	April 22	March 20
Abilene	35	Oct. 10	Nov. 15	April 23	March 15
Amarillo	29	Sept. 22	Nov. 1	May 23	April 10
Fort Worth	26	Oct. 22	Nov. 24	April o	March 8
Lampasas	3.2	Oct. o	Nov. 7	May 2	March 24
Taylor	10	Oct. 30	Nov. 22	April 5	March 13
Temple	30	Oct. 20	Nov. 15	April o	March 14
$\Lambda$ ustin	5.2	Oct.28	Nov. 18	April o	March 12
Waco	.3 I	Oct. 22	Nov. 15	April o	March 10
Gainesville	31	Oct. o	Nov. 7	May 1	March 31
Dallas	.3 I	Oct. 8	Nov. 13	May 1	March 10
Waxahachie	23	Oct. 9	Nov. 11	April 30	March 26
Corsicana	.3 I	Oct. 22	Nov. 14	Мау 1	March 15
Palestine	38	Oct. 20	Nov. 13	April 5	March 13
Nacogdoches	21	Oct. 21	Nov. 12	April 25	March 10
Greenville	20	Oct. 10	Nov. 18	April 26	March 10
Paris	20	Oct. 9	Nov. 15	April 12	March 20
Arkansas: Fort Smith		Oct. q	You =	Vivril	March 22
Fort Smith	37	Oct. 9	Nov. 5 Nov. 13	April 9 April 26	March 18
Pine Bluff	41 28	Oct. 11	Nov. 13	April 25	March 27
Texarkana	20	Oct. 11	Nov. 8	April 12	March 23
	20	vict. g	.,,,,,	April 12	Materia,
Tennessee: Memphis	1/0	Oct. 2	Nov. 2	April 25	March 22
Nashville	40 50	Oct. 8	Oct. 27	April 23	April 1
Chattanooga	42	Sept. 30	Oct. 26	May 14	April 2
Decatur	25	Oct. 10	Oct. 23	May 14	April 18
Knoxville	50	Oct. 1	Oct. 28	April 26	April 2
Октанома:					
Muskogee	21	Oct. 10	Nov. 2	April 21	March 30
Oklahoma	30	Oct. 7	Nov. 2	April 30	April 2
Missouri:					
St. Louis	48	Sept. 30	Oct. 24	May 22	April 6

### YIELD OF COTTON PER ACRE IN INDIA

### In Pounds

(From statistics compiled by Indian Department of Statistics)

Provinces and States	1917-18	1918-19	1919-20
Bombay*	73	<b>4</b> 6	105
Central Provinces and Berar	52	78	114
Madras*	69	74	71
Punjab*	68	127	120
United Provinces*	60	Sī	138
$\operatorname{Sind}^*$	70	144	100
Burma	78	76	73
Bengal*	107	175	145
Bihar and Orissa	99	101	100
North-West Frontier	53	7.2	47
Assam	162	145	170
Ajmer-Merwara	80	187	218
Hyderabad	52	107	07
Central India .	32	69	7.3
Baroda	105	10	64
Rajputana .	50	88	102
Mysore .	(10	40	50
Average	64	76	101

<sup>\*</sup> Includes Indian States.

### COTTON ACREAGE IN INDIA

(From statistics compiled by Indian Department of Statistics)

Provinces and States	1017-18	1918-19	1010-30
Bombay*	7,007,000	5,547,000	5,704.000
Central Provinces and Berar	4,582,000	4,135,000	4,494,000
Madras*	2,502,000	3,175,000	2,332,000
Punjab*	1,800,000	1,550,000	2,251,000
United Provinces*	1,315,000	862,000	1,284,000
Sind*	207,000	317,000	313,000
Burma	247,000	360,000	416,000
Bengal*	71,000	73,000	69,000
Bihar and Orissa	(10,000	79,000	77,000
Northwest Frontier .	38,000	39,000	51,000
Assam	32,000	33,000	33,000
Ajmer-Merwara	70,000	30,000	11,000
Hyderabad	3,451,000	2,406,000	3,005,000
Central India	1,454,000	1,236,000	1,587,000
Baroda	()14,000	814,000	794,000
Rajputana	4.35,000	250,000	374,000
Mysore	154,000	123,000	145,000
Total	25,188,000	21,038,000	23,003,000

<sup>\*</sup> Includes Indian States.

### COTTON PRODUCTION OF INDIA

These statistics embrace all cotton produced in India, including that used in house manufacture as well as that taken by factories or exported.

### In Bales of 400 Pounds Each

(From statistics compiled by Indian Department of Statistics)

Provinces and States	1017-18	1918-19	1919-20
Bombay*	1,403,000	()41,000	1,503,000
Central Provinces and Berar .	501,000	807,000	1,285,000
Madras*	450,000	587,000	413,000
Punjab*	307,000	493,000	673,000
United Provinces* .	198,000	174,000	442,000
Sind*	53,000	114,000	83,000
Burma	48,000	70,000	70,000
Bengal*	10,000	32,000	25,000
Bihar and Orissa	17,000	20,000	21,000
North-West Frontier	5,000	7,000	0,000
Assam	13,000	12,000	14,000
Ajmer-Merwara .	14,000	14,000	24,000
Hyderabad	450,000	643,000	740,000
Central India .	116,000	214,000	201,000
Baroda	239,000	81.000	127,000
Rajputana .	54,000	55,000	05,000
Mysore	2,3,000	14,000	18,000
Total	 4,000,000	3,978,000	5,845,000

<sup>\*</sup> Includes Indian States.

### ACREAGE AND PRODUCTION OF COTTON IN INDIA

These statistics of cotton production in India embrace all cotton produced in India, including that used in house manufacture as well as that taken by factories or exported.

(Compiled by United States Bureau of the Census)

				Ye	аг						Acreage Planted in Cotton	Crop (500-Pd. Bales)	Yield Per Acre (Pounds)
1910											22,596,000	3,082,400	68
1911											21,615,000	2,630,400	59
1912											22,028,000	3,688,000	84
1913											25,020,000	4,052,000	81
1914											24,595,000	4,167,200	85
1915											17,746,000	2,990,400	8.4
1916											21,745,000	3,601,600	83
1017											25,188,000	3,200,000	64
1918											21,038,000	3,182,400	76
1919								÷			23,063,000	4,676,000	101

# ACREAGE PLANTED TO EGYPTIAN COTTON, BY VARIETIES

Expressed in Feddans †

(Reported by Egyptian Ministry of Agriculture)

1920	1,270,481	283,906	44,008	37,320	30,051	12,558	2,087	147,390	1,827,870
6161	1,146,443	334,160	35,145	23,611	21,003	3,718	0.7	0,485	1,573,662
8161	952,481	273,936	36,240	21,587	20,736	4,871	223	5,498	1,315,572
7161	_					3,489			1,677,310
9161	1,032,140	343,589	041,446	62,127	66,602	3,391	4,220	1,097	1,655,512
1915	547,923	231,639	209,550	106,634	40,545	7,468	28,908	4,337	1,186,004
161	394,403	353,882	467,350	261,775	134,103	12,281	127,532	3,944	1,755,270
1913	247,292	356,485	623,737	201,137	65,958	37,383	173,439	17,663	1,723,094
1912	197,456	344,265	010,160	158,567	39,836	36,354	239,232	14,195	1,721,815
1161	119,636	329,843	845,665	115,492	*	33,390	250,972	16,243	1,711,241
	Sakellaridis	Ashmouni (Uppers) .	Mitafifi	Nubari	Afif Assil	Abbassi	Joannovich	Various	Total

\* Included in "Various". † 1 feddan = 1.038 acres.

### ACREAGE AND PRODUCTION OF COTTON IN EGYPT

(From statistics compiled by Egyptian Ministry of Finance and United States Bureau of the Census)

Year	Acreage in Feddans *	Acreage in Acres	Crop in Kantars Gross Weight †	Crop in Equivalent 500-Pd. Bales	Yield in Kantars Per Feddan	Yield in Pounds Per Acre
1910	1,642,610	1,664,000	7,505,000	1,506,000	4.57	453
1911	1,711,241	1,776,000	7,386,000	1,463,000	4.32	412
1912	1,721,817	1,787,000	7,400,000	1,402,000	4.35	417
1913	1,723,094	1,789,000	7,664,000	1,522,000	4.44	425
1914	1,755,270	1,822,000	6,451,000	1,286,000	3.67	353
1915	1,186,004	1,231,000	4,775,000	952,000	4.02	387
1916	1,655,512	1,718,000	5,000,000	1,012,000	3.06	205
1917	1,677,310	1,741,000	6,203,000	1,249,000	3.75	359
1918	1,315,572	1,413,000	4,821,000	955,000	3.66	338
1919	1,573,662	1,633,000	5,572,000	1,130,000	3.54	349

### FREIGHT RATES ON COTTON FROM NEW YORK TO LIVERPOOL

Per 100 Pounds

(Compiled by Messrs. Lambert & Barrows, Freight Brokers, Produce Exchange, New York)	
Rates on Standard B	lales
From 1910 to August, 1914, rates ranged from So.20 to So	·55
August, 1914 to November, 1914	.35
November, 1914 to December, 1914	.50
December, 1914 to January, 1915	.75
January, 1915 to November, 1915	.00
November, 1915 to January, 1916	.25
January, 1916 to February, 1916	.25
February, 1916 to May, 1916	.50
May, 1916 to July, 1916	.00
July, 1916 to September, 1916	.00
September, 1916 to December, 1916	.50
The state of the s	.75
June, 1917 to July, 1917	.00
July, 1917 to October, 1917	.00
November, 1917 (American steamers only) 8.00 to 9	.00

After November 1917, all ocean space for cotton was allocated by the British Ministry of Shipping. The rates on standard bales varied from \$3.25 to \$5.75. Beginning in this period, a distinction was made between rates for standard bales and for high density

Bales. Rates on Standard Bales	Rates on High DensityBale:
January, 1919 to July, 1919	_
July, 1919 to November, 1919 2.50	-
November, 1919 to August, 1920 1.80	\$1.15
August, 1920 to October 13, 1920 2.05	1.80
October 13, 1920 to October 21, 1920 1.62	$1.37\frac{1}{2}$
October 21, 1920 to December 28, 1920 1.35	1.15
December 28, 1920 to — 1.15	.90

# IMPORTS OF COTTON INTO THE UNITED STATES BY COUNTRIES OF PRODUCTION

Equivalent 500-Pound Bales

(From statistics compiled by United States Department of Commerce)

	-				
	Egyptian	Peruvian	Chinese	Others	Total
Month of					
December 1920	8,083	510	481	16,816	25,890
November 1920	2,041	1,004		18,568	22,513
October 1920	1 2	1,303	3,762	8,748	13,825
September 1920 .	2,402	7,617	3,260	6,626	20,004
August 1920	12,876	4,057	2,744	3,429	23,106
July 1920	12,969	2,828	9,533	3,658	28,988
June 1920	18,453	1,421	6,245	3,516	19,635
May 1920 .	6,890	2,058	4,427	2,392	15,767
April 1920	56,118	1,843	7,785	3,611	69,357
March 1920	110,952	5,046	12,757	4,972	133,727
February 1920	96,524	10,378	5.977	100,11	123,880
January 1920	66,553	16,710	2,156	19,066	104,485
December 1919	27,358	4,185	275	16,776	48,594
November 1919 .	31,020	5,054	1,152	14,862	52,088
October 1919	11,010	12,873	2,507	8,882	35,281
September 1919	45,868	1,026	2,417	5,031	54,342
August 1919	11,280	4	1,954	832	14,070
SEASON ENDING					
July 31, 1920	485,004	63,426	57,185	94,599	700,214
July 31, 1919	,	25,230	10,871	65,478	201,585
July 31, 1918	114,580	19,692	38,964	47,980	221,216
July 31, 1017	199,892	11,069	36,063	44,933	291,957
July 31, 1916	350,796	10,900	35,792	40,077	437,574
July 31, 1915	252,373	10,353	25,631	93,929	382,286
August 31, 1914	137,355	12,629	21,926	108,380	280,290
August 31, 1913	191,075	10,737	18,341	7,492	227,645

# EXPORTS OF DOMESTIC COTTON AND LINTERS FROM THE UNITED STATES, BY COUNTRIES TO WHICH EXPORTED

In Equivalent 500-Pound Bales for Years ending June 30th (Compiled by United States Department of Commerce)

XPORTED TO

All other countries	7,045	2,978 580 9,405 4,603	7.775 4.375 6,506 1,831	4,042 145,579 15,303 11,018	27,520 70,592 24,281 14,122 14,967 16,015
Mexico	18,522 35,103 27,500	66,507 56,172 79,082 29,285	732 4,767 42,575 29,604	4,631 16,129 20,077 34,671	39,727 L 23,605 L 5,208 L 10,706 J 1,707 L
Canada	100,083 102,080 120,016	88,795 88,795 115,857 111,908	150,343 113,997 131,453 125,592	156,824 181,667 152,015 150,093	182,700 107,659 187,201 240,073 203,015
Japan	323,202 78,558 178,505	152,826 45,870 336,575 147,269	262,283 200,396 208,043 95,000	156,724 180,034 396,779 353,440	503,077 530,892 553,546 553,546 583,546 589,313 576,250
All other Europe	65,635 52,325 61,679	82,243 61,488 72,911 44,486	65,083 62,125 58,174 43,378	48,713 83,821 55,376 63,725	\$98,096 160,154 184,717 82,572 203,949 183,729
Nether- lands	74,635 53,180 22,418	12,542 16,055 31,163 18,490	20,002 27,684 30,129 18,823	18,124 35,242 11,537 35,053	544,035 102,087 62,161 10,008 57,949 186,476
Russia ' Austria†	44,919 37,238 39,757	39,012 28,158 62,572 50,375	113,630 90,049 94,782 57,220	70,530 125,564 113,182 106,511	55,380 42,8380
	54,050 53,171 73,446	181,938 168,500 129,060 112,480	08,371 90,075 90,075 97,203	84,94t 112,262 74,007 90,076	82,125 173,449 49,189 15,045 310
Belgium	148,319 154,682 132,232	157,351 105,213 145,564 114,673	154,168 119,470 157,631 102,346	150,225 211,903 220,967 227,474	5,057 - - 72,052 201,572
Spain	246,612 237,346 270,602	266,336 184,862 295,537 241,747	275,868 262,744 301,789 178,455	242,073 313,500 317,954 297,330	464,504 340,240 394,093 259,194 281,343
Italy	443,951 365,359 445,437	441,050 363,205 531,735 486,607	\$67,016 418,021 \$65,605 393,327	130,206 630,077 500,823 537,357	1,127,400 830,015 687,158 360,213 557,549 617,263
France	736,002 754,329 775,773	806,673 734,286 818,304 817,583	1,006,633 889,083 1,008,173 908,422	1,021,008 1,228,294 1,074,987 1,130,399	692,699 890,376 1,055,749 658,553 773,741 596,391
Germany	1,619,173 1,629,935 1,705,815	1,915,094 1,797,354 2,011,679 1,871,441	2,315,651 2,385,663 2,438,090 1,887,657	2,202,707 3,156,171 2,443,886 2,884,324	294,194 
United Kingdom	2,302,128 3,106,857 3,132,324	2,790,096 1 2,475,752 1 3,967,254 2 3,181,143 1	3,966,IIQ 2 2,956,352 2 3,605,355 2 2,444,558 1	3,461,051 2 4,343,108 3 3,710,898 2 3,581,501 2	3,919,749 2,760,800 2,895,423 2,387,101 2,494,009 3,444,794
Total	6,201,166 6,661,781 7,001,558	7,086,086 6,126,386 8,609,698 7,268,000	9,036,434 7,633,097 8,895,970 6,413,416	8,067,882 11,070,251 9,124,591 9,521,881	8,807,157 6,168,140 6,176,162 4,641,023 5,525,893 7,087,187
YEAR Total value	\$241,832,737 313,673,443 290,651,819	316,180,429 370,811,246 379,965,014 401,005,921	481,277,797 437,788,202 417,300,655 450,447,243	585,318,869 565,849,271 547,357,105 610,475,301	376,217,972 374,186,247 543,074,090 655,024,655 873,579,069 1,381,707,502
YEAR	1900 1901 1902	1903 1904 1905 1906	1907 1908 1909 1910	1911 1912 1913 1914	1915 1916 1917 1918 1919 1920 1

\*Includes Finland and Poland prior to 1019. Fincludes Czecho-Slovakia and Hungary prior to 1920.

# EXPORTS OF COTTON AND LINTERS FROM THE UNITED STATES

In Running Bales

(From statistics compiled by United States Bureau of the Census)

	Total	Ë	Total		COTTON AM	COTTON AND LINTERS EXPORTED TO	RTED TO	
	Cotton Exclusive of Linters	Linters	and Linters	United Kingdom	Germany	France	Italy	All Other Countries
MONTH OF								
December 1920	785,300	3,170	788,578	317,431	160,587	05.045	50,418	185,107
November 1920	680,822	2,501	683,323	240,336	120,005	119,893	57.17.3	145,310
October 1920	580,305	1.700	582,014	211,085	70.7.32	121,160	45.890	124,141
September 1920	226,023	1,445	228,008	104,795	42,320	35,461	11,067	33,510
August 1920	144.070	1,689	140,008	43.715	45.043	8,897	0,159	39,254
July 1920	208,366	3.475	211,841	60,765	25,454	10,440	860.04	69,084
June 1920	237.589	3,800	241,440	72,005	43,141	10,552	0,005	02,080
May 1920	359.354	0.50.50	304,904	121,031	42,017	20,008	32,714	148,144
April 1920	539.007	6,158	546,125	161,938	70,036	22.285	71,908	210,058
March 1920	789.989	174.4	734,460	375,393	25,847	45.208	62,458	255,404
February 1920	0.34,10.3	6,217	640,320	322.080	31,835	82,030	44,180	159,239
January 1920	022,280	7,301	170,020	479,323	20,053	87,025	210,00	242,753
December 1919	873.752	3,001	876,843	442,210	31,850	80,107	07'070	228,500
November 1919	921,632	3,110	024,751	520,881	40,358	120,341	50,004	193,077
October 1919	351,411	820	352,231	187.870	33.041	45,350	00,71	67,770
September 1919	2,33,011	3,083	230,004	85.589	27,200	5.430	21,340	97,120
August 1919	473,872	5,180	479,058	239,350	21,747	30,383	30,053	151,525
SEASON ENDING								
fuly 31, 1920	6,545,326	53,021	6,538,347	3,069,341	44.3.179	570,238	570,150	1,930,440
July 31, 1919	5,502,380	71,534	5,663,920	2,035,198	ı	734,739	588.373	1,705,610
July 31, 1918	4,288,420	187,704	4,476,124	2,276,543	ı	615,995	373,812	1,200,774
July 31, 1917	5,200,519	430,100	5,730,000	2,682,170	I	994,085	043,573	181,614,1
July 31, 1916	5,805,072	205.438	0,191,110	2,859,162	1	921,032	788,005	1,621,111
July 31, 1915	8,322,088	221,875	8,544,503	3,771,646	242,061	082,030	1,110,541	2,737,085
August 31, 1914	8,054,058	259,881	8,914,839	3,384,707	2.713,107	1,033,500	503,158	1,280,268
August 31, 1913			8,800,000	3,559,258	2,404,397	1,022,042	406,499	1,318,170
August 31, 1912	Not Separat	Not Separately	7,781,414	Statistics of	Exports of cotto	a to individual control	ountries in terms	Statistics of Exports of cotton to individual countries in terms of running bales
August 31, 1910		- nand	6,339,028	and for cotton season are not available for years prof. In capits showing exports ports in terms of equivalent years and for years ending June 3oth shows exports to each country as far back as 1000.	son are nor avan quivalent 500-pd s far back as 1900	and sour years pure bales and for year.	ars ending June 3	and for cotton season are not available to years prior to 1015. The cable showing ex- ports in terms of equivalent 50-yel, bales and for years ending June 30th shows exports to each country as far back as 1020.

# ANNUAL EXPORTS OF COTTON FROM THE UNITED STATES, BY PORTS

In Running Bales, including Linters

(Compiled by New York Cotton Exchange)

	1917-18	1918-19	1010-20
Galveston	791,821	1,574,307	1,040,504
New Orleans	736,664	1,291,487	1,348,677
Mobile	79,408	86,045	122,102
Savannah	511,535	718,683	1,178,004
Charleston	. –	14,042	143,008
Wilmington	68,069	63,830	102,792
Norfolk	101,051	50,003	169,807
Baltimore	79,927	16,055	12,662
New York	870,078	670,575	198,557
Boston	165,876	37,314	20,610
Philadelphia	29,725	23,280	13,008
Newport News	_	_	_
Brunswick	132,211	128,464	178,174
Pensacola	30,087		18,743
Port Arthur	8,120	-	
Port Townsend	407,336	617,731	334,014
San Pedro, Calif., etc.	_	-	13,008
San Francisco	160,071	122,054	122,343
Portland, Ore.	773	122	31,687
Nogales	200	2.30	485
Texas City, etc.	2,207	63.476	248,480
Eagle Pass	700		70
El Paso			15
Houston	_	-	70,284
Portland, Me.	1,701	-	-
Jacksonville	-	9,532	24,513
Georgetown	_		_
Total	4,188,420	5,497,829	6,362,686

### RECEIPTS OF COTTON AT UNITED STATES PORTS

New York Cotton Exchange Statistics. In Running Bales, including Linters

	1917-18	1918-19	1919-20
Galveston	1,621,886	1,933,092	2,101,119
New Orleans	1,664,267	1,635,444	1,366,735
Mobile	107,290	155,516	265,176
Savannah .	1,140,591	1,150,618	1,306,361
Charleston .	203,879	217,226	445,123
Wilmington	98,913	151,882	142,758
Norfolk	209,882	304,012	349,661
Baltimore .	77,461	22,336	92,063
New York	182,808	12,970	30,229
Boston	111,867	30,147	44,362
Philadelphia .	21,221	8,065	21,284
Newport News	-	_	1,476
Brunswick	158,741	190,944	162,777
Pensacola	15,439	3,928	15,095
Port Arthur	8,120	_	1,164
Port Townsend	366,019	602,731	314,347
San Pedro, Calif., etc.	_		13,367
San Francisco, etc	107,090	133,090	120,859
Portland, Ore.	773	122	30,301
Nogales	200	230	485
Texas City, etc.	74,768	124,276	331,324
Eagle Pass	700	_	70
El Paso	_	_	1.5
Houston		_	70,284
Jacksonville .	43.544	29,887	20,890
Total .	6,365,519	0,707,416	7,247,415

### TAKINGS OF AMERICAN COTTON BY SOUTHERN MILLS

New York Cotton Exchange Statistics. In Running Bales, including Linters

	1917-18	1918-19	1010-20
Alabama .	391,046	320,977	363,710
Georgia	834,725	714,665	822,454
Louisiana .	39,335	34,982	45,127
Mississippi .	40,371	36,835	35,836
Missouri	12,204	18,316	22,922
North Carolina	1,222,420	1,066,348	1,141,487
Oklahoma	6,684	0,045	7,266
South Carolina .	904,744	778,123	850,959
Tennessee	104,295	87,151	103,723
Texas	78,212	69,988	82,050
Arkansas, Florida, Kentucky, Virginia	680,699	307,855	152,643
Total	4,314,735	3,441,285	3,628,177
Takings via ports		197,566	226,941
Net takings	3,864,160	3,243,719	3,401,236

# WORLD'S TAKINGS OF AMERICAN COTTON DURING PAST SIX **SEASONS**

In Thousands of Running Bales. Linters Included (New York Cotton Exchange Statistics)

Aug.	13 20 27	Week - 142 107	Season	Week	Season	Week	Season	W .1	Season	11: 1			
Sept.	13 20 27		_				Deason	Weck	Scason	Week	Season	Week	Season
Sept.	13 20 27			114	114	- 83	e 83	50 <sup>1</sup>	50	10%	10		
•	20 27		142	170	204	I 24	207	102	150	173	215†		T.10
•	20 27		310	100	454	170	377	110	277	137		140 168	149
•		182	402	171	625	127	504	112	379†	147	351		317
•		176	668	172	797	143	647	147	400†	137	499 635	171	488 602°
0-4	- 3	211	870	104	100	110	766	1.28	588†	100			
0-4	10	182	1,061	222	1,213	137	903	140	-	158	795	145	746
0-4	17	216	1,277	243	1,456	107	1,070	170	737 926†	171	954	130	886
0-4	24	206	1,483	27 I	1,727	174	1,244	104	1,080	185	1,125	175	1,000
Oct.	I	260	1,743	284	2,011	108	1,441	186	1,270†	223		157 184	1,217
	8	285	2,027	366	2,377	232	1.073	205	1,481	214	1,532		1,401
	15	319	2,347	401	2,778	283	1.083†		1,726†		1,746	184	1,585
	22	331	2,078	407	3,240	202				221	1.907	101	1,777
	20	375	3.053				2,275	242	1,967	234	2,201	100	1,967
Nov.	5	403	3,450	477	3.723	282	2.54.3†	203	2,157†	286	2,487	207	2,234
	12	358	3,814	492	4,215	320	2,872	201	2,418	202	2,770	220	2,455
	10	333	4,147	443	4,057	351	3,175†	300	2,723	323	3,102	210	2,064
	26	329		430	5,087	387	3.525	301	3,017	347	3,449	252	2,016
Dec.			4,476	388	5,475	433	3,9301	324	3.341	411	3,859	208	3,124
	3 10	385	4,861	366	5,842	414	4,340	322	3,648†	420	4,288	284	3,410
		356	5.217	280	0.131	300	4,700	202	3,040	392	4,681	210	3,626
	17	304	5,521	277	6,408	300	5,092†	280	4,273	482	5,102	253	3,879
	24	325	5,846	276	6,684	335	5,427	303	4.570	344	5,500	274	4,184
	31	272	6,117	274	6,958	330	5,763†	354	4.030	381	5.807	284	4,468
Jan.	. 7	273	6,300	250	7,208	342	6,125	320	5,201	403	0,380†	_	-
	1.4	333	6,723	272	7,480	315	6.486†	283	5.404	375	6,605†	-	_
	21	207	7,020	271	7.752	235	6,722†	280	5,729Ť	386	7,081	-	
	28	281	7,301	105	7,947	27 I	7,004	253	5,981	280	7,370		
Feb.	4	269	7.570	IOO	8,147	204	7,180†	211	6,198	220	7,552†		-
	11	273	7,843	225	8,372	234	7,461†	I ()O	6,388	205	7,778†	_	
	18	274	8,117	2 I I	8,582	202	7,688†	183	6,666	200	8,043†		
	25	274	8,391	2,32	8,814	238	7,920	231	6,877†	263	8,321†	_	-
	4	284	8,675	27.5	0.030	103	8,110†	182	7,059	20 I	8,612†	_	
	11	250	8,034	210	0,308	IOI	8,214	225	7,284	204	8,905	-	-
	18	204	0,228	220	9.529	185	8.399†	102	7,441†	245	9,120†		_
	25	275	9,503	268	9,797	145	8,535†	172	7,613†	212	9,332		-
Apr.	1	251	9,753	222	0.010	184	8,674†	130	7,718†	100	0,403		-
	8	212	9,966	202	10,281	203	8,877	101	7,879	238	9,698†	_	-
	15	273	10,230	267	10,548	2.37	9,170	143	8,038†	188	0,860†	_	_
	22	244	10,483	200	10.844	108	9.377†	110	8,154	218	10,087	_	
_ 3	29	250	10,742	252	11,036	178	9.570†	COL	8,307	225	10,312	-	_
May	6	29 I	11,033	210	11,315	213	9.732†	165	8,476	105	10,418†		
1	13	227	11,260	22 I	11,530	120	9,928†	140	8,625	100	10,558†	_	
2	20	270	11,535	238	11,776	155	10,074	1.47	8,772	168	10,727		
	27	270	11,800	222	11,995	COL	10,203	102	8,964	202	10,932†	_	
une	3	242	12,048	183	12,170	151	10,650*	170	9,135	100	11,121		
1	0	231	12,270	178	12,357	121	10,771	120	9,260	172	11,203		_
I	17	210	12,488	158	12,515	1.50	10,020	154	9,405†	100	11,402†	_	_
2	24	192	12,680	185	12,700	1,33	11,053	107	0.572	168	11,630	_	
	I	182	12,862	167	12,868	108	11,221	105	9.738	177	11,807	_	_
	8	216	13,078	198	13,005	131	11,352	137	9.730	205	11,951		_
	5	100	13,207	154	13,219	128	11,485	137	10,013	104	12,125		_
	2	153	13,420	154	13,373	134	11,615	133	10,146	138	12,260†	_	_
	9	185	13,005	80	13,453	127	11,742	47	10,224†	102	12,364†	_	_
	0	26	13,631	-	13,453		11,742	-/	10,224	20	12,507	_	
					10+10.1		/-+-		. 0,224	20	1-,50/1		

a r day.

b 2 days.

c 3 days.

d 4 days.

\* Adjusted.

† Corrected.

# MOVEMENT OF AMERICAN CROP INTO SIGHT DURING PAST SIX SEASONS

In Thousands of Running Bales. Linters Included (New York Cotton Exchange Statistics)

	IĢ	)15-16	19	16-17	10	17-18	10	18-19	19	10-20	192	20-21
	Week	Season	Week	Season	Week	Season	Week	Season	Week	Season	Week	Season
	_	_	32 d	32	17°	17	13 <sup>h</sup>	13	I 2 <sup>n</sup>	1.2	_	_
Aug. 6	39	39	Šī	112	5.2	68	47	60	66	100+	40	40
13	37	76	71	184	5.5	123	66	127	65	174	31	72
20	69	145	107	291	107	231	7.5	155†	65	239	66	138
27	62	207	186	477	155	385	132	287	60	300	84	236*
Sept. 3	III	318	324	Soi	162	548	148	435	63	363	99	335
10	202	520	37 I	1,171	213	701	205	627†	106	469	129	464
17	307	827	458	1,630	265	1,020	272	902†	145	590*	171	635
2.4	437	1,264	556	2,185	308	1,334	316	1,213†	195	786	237	872
Oct. 1	495	1,750	630	2,815	366	1,690	310	1,524†	273	1,050	300	1,171
8	500	2,260	643	3,458	422	2,121	347	1,871	342	1,400	321	1,403
15	525	2,794	660	4,118	461	2,608†	354	2,230†	417	1,818	366	1,859
2.2	525	3,310	633	4,751	470	3,085	401	2,631	301	2,232	433	2,202
20	510	3,820	700	5,460	476	3,556†	372	3,003	503	2,735	446	2,739
Nov. 5	524	4.347	633	6,093	451	4,008	376	3,379	530	3,260	443	3,182
I 2	471	4,818	590	6,682	480	4,541†	395	3,774	544	3.810	414	3,596
10	448	5,257†	540	7,223	497	5,038	386	4.183†	513	4.323	387	3,983
20	397	5,654	484	7,706	479	5,516	340	4.497†	549	4,872	380	4,364
Dec. з	442	6,036	468	8,175	500	6,013†	338	4.708†	529	5,401	399	4,764
10	514	0,600	363	8,537	381	6,394	355	5,153	496	5,807	386	5,150
17	459	7.0571	202	8,820	372	6,7027	414	5,610†	474	6,371	369	5,519
24	393	7,450	270	0,000	396	7,180	398	0,017	401	6,701†	348	5,898*
31	331	7,781	218	9,317	355	7.544	301	6,378	447	7,248†	332	6,230
Jan. 7	242	8,023	173	0.491	360	7.923†	337	0.710	450	7,718†	_	-
14	311	8,334	220	0,720	303	8,273†	334	7,127	423	8,170†	_	_
2 I	237	8,571	156	9.875	241	8,558‡	294	7,421	375	8,545	_	_
28	228	8,799	158	10,033	221	8,780†	243	7,687†	268	8,813	_	_
Feb. 4	197	8,996	142	10,175	200	8,980	255	7,942	270	9,089	_	
11	207	0,203	125	10,301	212	9,252†	212	8,155	267	9,350	_	_
18	232	9,434	130	10,437	202	9,479†	188	8,448†	260	0,616	_	_
25	233	9,667	125	10,562	222	9,695†	237	8,696†	267	0,808†		
Mar. 4	177	9.844	131	10,633	183	0,861†	100	8,856	203	10,101	_	
1 1	163	10,007	148	10,841	180	10,124†	192	9,048	101	10,202		_
18	177	10,184	147	10,088	176	10,334†	150	0,2027	160	10,461		
2.5	100	10,362†	151	11,130	140	10,480†	160	9,362	107	10,628		_
Apr. i	20S	10,500†	160	11,200	123	10,013	115	9,478	152	10,780		-
8	160	10,735	147	11,446	99	10,711	125	0,602	165	10,929	-	_
15	140	10,884	155	11,000	71	10,830†	106	9,703	112	11,050		
2.2	174	11,058	1,30	11,730	82	10,021	124	9,832	140	11,218	-	-
20	155	11,213	114	11,844	89	11,010	121	9,954	86	11,304		
Мау б	143	11,355	115	11,060	86	0,00,11	129	10,083	7.2	11,340		-
13	135	11,400	111	12,070	76	11,235†	$I \cap I$	10,183	78	11,443†	_	
20	174	11,664	80	12,150	66	11,301	107	10,200	71	11,514		-
27	145	11,800	101	12,251	87	11,388	159	10,440	78	11,595	-	_
June 3	133	11,942	68	12,310	8.4	11,701*	187	10,636	68	11,662		
10	93	12,041	59	12,378	70	11.771	164	10,800	5.3	11,715		-
17	79	12,120	85	12,403	70	11,847	117	10,018†	47	11,765†	_	
2.4	II2	12,232	01	12,554	64	11,011	113	11,031	49	11,814	_	-
July 1	98	12,330	80	12,632†	54	11,965	115	11,140	56	11,860	_	
8	100	12,430	31	12,662	53	12,018	105	11,251	65	11,970†	_	-
15	90	12,526	36	12,698	53	12,071	100	11,357	46	12,010	_	_
22	67	12,593	19	12,717	60	12,131	74	11,443†	49	12,052†	_	-
29	56	12,050	37	12,754	72	12,203	56	11,449†	45	12,064†	_	_
30	71	12,720	_	12,754	_	12,203	-	11,440	7	12,298†	-	_

# AMERICAN (INCLUDING CANADIAN) TAKINGS OF AMERICAN COTTON DURING PAST SIX SEASONS

In Thousands of Running Bales. Linters Included (New York Cotton Exchange Statistics)

	10	15-10	10	16-17	10	17-18	101	8-19	101	19-20	10.	20-2 <b>I</b>
	Week	Season	Week	Season	Week	Season	Week	Season	Week	Season	Week	Season
		_	254	25	41 °	41	18 <sup>b</sup>	18	5 <sup>a</sup>	5	_	
Aug. 6	40	40	40	71	63	101	63	82	57	93†	48	48
13	44	83	57	128†	67	171	58	130	53	140	50	99
20	55	138	60	188	61	232	58	107	57	203	47	146
27	44	182	57	246	7.3	305	90	287	73	270	54	203*
Sept. 3	78	200	91	337	62	368	71	342†	00	330	55	258
10	77	337	III	447	78	445	86	427	63	398	67	325
17	99	436	100	557	98	543	118	541†	81	479	60	394
24	110	546	157	713	110	636†	110	050	87	566	86	479
Oct. I	1.48	093	178	801	118	754	120	747†	112	679	98	577
8	164	857	241	1,132	135	880	1.11	888	100	788	105	682
15	201	1,059	264	1,306	166	1,050†	142	1,026†	133	921	110	801
22	212	1,270	314	1.710	104	1,188†	173	1,198	137	1,058†	123	924
20	232	1,502	355	2,066	225	1,300	182	1.380	181	1,230	140	1,072
Nov. 5	230	1,738	360	2,426	201	1,660	100	1,570	194	1,433	143	1,215
12	221	1,050	327	2,753	257	1,014	230	1.817	234	1,007	126	1,341
10	220	2,178	294	3,047	286	2,200	210	2,015	220	1,896	125	1,466
20	206	2,384	220	3,267	320	2,507†	222	2,237	200	2,180	114	1,580
Dec. 3	240	2,624	193	3,460	307	2,810	230	2,461†	302	2,488	134	1,700
10	208	2,832	152	3,612	253	3,004	221	2,681	277	2,705	140	1,846
17	200	3,032	151	3,703	201	3,335†	231	2,893†	278	3.043	147	1,002
24	100	3,228	134	3,897	203	3,598	220	3,121	200	3,303	151	2,105
	193	3,421	150	4,040	203	3,861	227	-	205	3,566†	146	2,311
Jan. 31	100	3,587	124	4,170	248	4,100	220	3,349	272	3,820	-	-,511
14	104	3,780	101				201	3,570	238		_	_
21	153		101	4,331	227	4.336	168	3,771	220	4,050		_
28	141	3.933	121	4.433	144	4,404†		3,939	138	4,279 4,418		
The second second		4.074 4,218		4.554	180	4,052	157	4,005				
Feb. 4	143		90	4,044	158	4,703	147	4,242	113	4.530	_	
18	137	4,354	98	4.742	154	4,935	12,3	4,300	115	4,646		
	145	4,400	61	4,804	130	5,033†	107	4,4717		4.751		_
Mar. 4	152	4,051	0.4	4,807	147	5,180	112	4,583	104	4,804†		
Mar. 4	1.10	4,800	120	5,017	125	5.305	10	4,675	99	4,002 5,000		_
18	124	4.024	117	5,135	103	5,405	01	4,766	103			
	149	5,073	105	5,230	122	5,510†	5.2	4,793 1	71	5,137		
April 1	130	5,212	131	5.370	102	5,611	57	4,850	58	5,105	_	
April 1 8	123	5,335	141	5,512	110	5,730	48	4,898	46 78	5,240		
		5,441	144	5,050	124	5,854	52	4,949		5,303†		
15	125	5,500	120	5.784	135	5.975	37	4,086	32	5,326†	_	
22	113	5,678 5,808	140	5,934	120	0,074Ť 0,179	49	5,030	33	5,376†		
May 6		-	111	0,045	105		48	5,083	35	5,410		
	111	5.949		0,153	137	0,316	49	5,132	57	5,405		
13	115	6,064	120	0,274	77	0,390†	47	5.170	58	5,402		
20	134	6,197	100	0,383	97	0,487	54	5,232	40	5,512		
June $\frac{27}{3}$	117	0,315	90	0,472	I 20	0,607	55	5,287		5,504†		
	107	0,421	82	6,555	88	6,749†	(10	5,401†	00	5,021†		
10	105	0,520	84	6,630	0.5	6,814	5.5	5.450	44	5.005 5.705*		
17	S 2	0,608	82	0,720	0.2	6,907	44	5.367Ť	47			
July I	55	0,063	80	0,810	71	6,978	43	5,410	() I	5.700		
July 1 8	83	0.746	7 1	6,881	7.2	7,050	40	5.459	83	5,845		
	81	6,827	52	0,033	7.2	7,122	53	5,511	54	5,934		
15	66	6,893	73	7,000	75	7,107	38	5,540	04	5.993†		
22	49	0,942	76	7,082	73	7,270	45	5,594	00 01	6,050† 6,086†		
20	55	6,997	26	7,108	- 69	7,340	35	5,000†				
30	2.2	7,019	_	7,108	_	7,340	_	5,600	27	6,353†		
	,		,		,				,			

a i day.

b 2 days.

c 3 days

d 4 days.

\* Adjusted.

† Corrected.

### MONTHLY MOVEMENT OF COTTON INTO SIGHT

With Total Movement to the End of Each Month and Per Cent. of Total for the Season In Running Bales. Linters Included

(Based on New York Cotton Exchange Statistics)

	1912-13	1013-14	1014-15	1015-16
August	282,630	364,871	59,075	253.467
	2.016	2.45 c	.38%	1.99 <sup>67</sup> 0
September	1,451,750	1,626,570	733,235	1,439,385
	1,734,380	1,991,441	792,310	1,692,852
	12.35 <sup>t</sup> c	13.39 (	5.13' c	13.26° o
October	2,046,713	2,937,051	1,960,519	2,246,441
	4,081,102	4,928,492	2,752,829	3,939,293
	33.33°. o	33.14°6	17.81° 6	30.8566
November	3,010,504	2,843,247	2,460,350	1,979,471
	7,700,606	7,771,739	5,213,179	5,918,764
	54.83°, 6	52.26° (	33.74° e	46.35° o
December	2,316,324	2,370,405	2,479,441	1,889,000
	10,016,030	10,151,234	7,692,620	7,807,764
	71.25 c	68.25 6	49.78° c	<i>61.15</i> 6
January	1,299,808	1,713,034	2,298,922	1,105,687
	11,316,738	11,864,268	9,991,542	8,913,451
	80.57. c	79.77 (	64.66 (	69.80 e
February Total to February 28th Per Cent of Season Total	817,026	1,044,988	1,867,631	832,481
	12,134,664	12,90.),256	11,850,173	9,795,932
	86.39' o	89.79 $\tilde{\epsilon}$	76.75' c	76.56' o
March	616,330	741,562	1,441,742	\$18,707
	12,750,094	13,650,818	13,300,015	10,614,639
	90.78' 6	91.78°;	86.08° e	\$3.05°6
April	557,368	500,047	1,008,386	697,231
	13,308,362	14,100,765	14,309,301	11,311,870
	94.75° o	<i>95.21</i>	<i>92.60</i> 6	88.59° 6
May	372,761	373,497	575,056	648,588
	13,681,123	14,534,262	14,884,357	11,060,458
	<i>07.40</i> ° è	97.72'.o	96.33	93.67' é
June	206,780	249,212	291,100	419,011
	13,887,903	14,783,474	15,175,466	12,379,469
	<i>98.8</i> 7′.6	99·39' (	<i>98.21</i> 6	96.95 <sup>6</sup> 6
July	157,560	89,394	276,843	389,867
	14,045,463	14,872,868	15,452,309	12,769,336
	100,00 <sup>f</sup> 6	100.00°C	100.00 <sup>6</sup> 6	100.00° 0
Total Into-Sight	14,037,814 a Ded: 44,592	14.854.445 <sup>b</sup> Add. 29,244	15,450,214° Ded.313,929	
Total Crop	13,993,222	14,883,689	15,130,285	12,861,538

a After deduction for 7,049 bales burned.
b After deduction for 18,423 bales burned.
d After deduction for 40,024 bales burned.
b Deduct excess of stock at interior towns over previous year; add decrease of stock at interior towns under previous year.

### MONTHLY MOVEMENT OF COTTON INTO SIGHT

With Total Movement to the End of Each Month and Per Cent. of Total for the Season In Running Bales. Linters Included

(Based on New York Cotton Exchange Statistics)

	1916-17	1917-18	1918-19	1919-20	1023-21
August	436,130 3.42° c	385,200 3.16° (	306,142 2.67° c	307.519 2.49 6	203,001
September	1,845,607 2,281,737 17.89° c	1,004.377 1,389,676 11.39	1,016,526 1,308,147† 11.42° (	625,553 909,626 <sup>b</sup> 7·39 <sup>°</sup> c	824,694 1,117,695 -
October	2,909,144 5,190,881 40,70° c	2,036,480 3,452,714 <sup>b</sup> 28.29 <sup>C</sup> c	1,640,896 2,946,854 <sup>b</sup> 25.74 <sup>c</sup> c	1,802,055 2,735,481 <sup>b</sup> 22.24 <sup>c</sup> 6	1,703,884 2,821,579
November	2,462,256 7,653,137 60.01 <sup>6</sup> 6	2,023,263 5,516,425 h 45.21 C	1,613,001 4,556,604 <sup>b</sup> 39.79 (	2,237,232 4,972,713 40.43 c	1,782,211 4,603,790
December	1,492,667 9,145,804 71.71,0	1,800,359 7,339,296 <sup>b</sup> 60.15 <sup>6</sup> c	1,637,316 6,209,369 <sup>b</sup> <i>54.24</i> °¢	2,135,445 7,137,148 <sup>b</sup> 58.03′ o	1,593,800 6,197,590
January	860,082 10,011,880 78.50° c	1,307,986 8,757,881 <sup>b</sup> 71.77° c	1,386,652 7,686,760 <sup>b</sup> 67.14 <sup>C</sup> c	1,666,446 8,853,138 <sup>b</sup> 71.99' o	
February	533,885 10,545,771 82.69°, 0	829,743 9,672,448 <sup>b</sup> <i>79.27</i> (	892,955 8,695,681 <sup>b</sup> 75.95′ o	1,067,433 9,935,750 <sup>b</sup> 80.79 <sup>c</sup> e	-
March	635,652 11,181,423 87.67° 6	740,316 10,511,575 <sup>b</sup> 86.14 <sup>c</sup> .	713,094 9,404,331 <sup>h</sup> 82.14',6	804,322 10,740,072 87.33' ε	
April	606,302 11,787,725 92.43° 6	407,891 10,975,758 <sup>b</sup> 89.95 <sup>c</sup> c	510,968 9,915,299 86.60° (	551,735 11,303,815 <sup>b</sup> 91.91' <sub>10</sub>	-
May	451,545 12,239,270 95.97 ϵ	349,456 11,617,444† <i>95.21</i> 6	562,678 10,477,977 91.52',0	313,187 11,608,720 <sup>b</sup> <i>94-48</i> . o	
June	337,546 12,576,816 <i>98.62</i> <sup>6</sup>	305,922 11,923,360 <i>97.71</i> 6	582,332 11,061,320 <sup>h</sup> 96.61 <sup>c</sup>	240,228 11,851,808 <sup>b</sup> 96.37' i	-
July	179,947 12,753,891 a 100.00°, 0	279,263 12,202,629 100.00 c	419,184 11,449,366 <sup>b</sup> 100.00°°	229,127 12,298,302 b 100.00 o	- -
Total Into-Sight Deduct or Add*	12,753,891 Ded. 10,328	12,202,620 Ded.338,120	11,449,366 Ded. 55,224	12,298,302 Ded. 45,965	_
Total Crop	12,737,563	11,354,500	11,394,142	12,252,337	-

a 2,872 bales burned. b Corrected. † Adjusted.

<sup>\*</sup> Deduct excess of stock at interior towns over previous years; add decrease of stock at interior towns under previous years.

## RECEIPTS OF COTTON AT ALEXANDRIA, EGYPT

In Cantars of 99.049 Pounds Each

(From statistics compiled by the Alexandria General Produce Association)

New   Since Sept.   Since Sept.				8-19	19	19-20	1920-21		
10	WEEK ENDING		Week	Since Sept. 1	Week	Since Sept. 1	Week	Since Sept. 1	
10	Sentember	. ,	5 805	5.805	20.051	20.051	T.3T2	1 212	
17	September	-							
October 1 137,7250 279,218 217,487 487,501 92,251 223,135 8 104,607 473,915 234,404 722,085 135,841 358,070 15 247,060 721,876 290,107 1,021,282 158,380 517,350, 22 240,500 00.2,376 311,472 1,332,754 170,300 687,725 29 213,423 1,175,700 233,741 1,506,405 141,073 828,708  November 5 281,493 1,457,202 178,678 1,745,173 133,080 961,878 10 277,732 1,901,073 331,180 2,021,650 180,008 1,148,706 26 245,104 2,230,777 208,047 2,700,883 104,722 1,548,255 26 245,104 2,230,777 208,047 2,700,883 104,722 1,548,255 244 172,392 2,001,028 150,880 3,050,270									
October         1         137,250         279,218         217,487         487,501         9,251         223,135           8         104,697         721,876         290,107         71,876         290,107         71,875         290,107         71,876         290,107         71,876         290,107         71,876         290,107         71,876         290,107         71,870         290,107         1,021,252         158,380         517,360         687,736         311,472         1,332,754         170,300         687,736         828,798           November         5         281,493         1,457,202         178,678         1,745,173         133,080         961,878           10         277,732         1,991,073         331,180         2,402,836         2,042,836         2,047,173         143,335,333         2,042,836         2,042,836         2,041,737         143,442         1,438,255         2,041,777         143,442         1,438,255         2,041,777         143,442         1,438,255         2,041,777         143,444         1,601,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,701         1,001,70									
8	October								
15	October								
November   1				.,			00,		
November   5									
November   5   281,493   1,457,202   178,678   1,745,173   133,086   061,878   12   256,739   1,713,041   320,483   2,071,655   180,008   1,148,796   247,732   1,901,673   331,180   2,402,836   204,737   1,333,585   242,873   1,333,585   242,873   1,333,585   242,873   1,333,585   242,873   1,333,585   242,875   245,005   242,870   243,400,90   130,411   1,821,742   1,548,255   247,2302   2,901,073   2,582,280   3,650,270   3,041   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   130,411   1,821,742   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   3,400,900   4,501,035   -								828.708	
12	November				00.,				
December   10		U							
December   3									
December   3				2,236,777					
10	December								
17				2,622,451	406,822				
January   183,481   3,175,109   247,276   4,057,141   -					258,280			- '	
January 7 183,481 3,175,109 247,276 4,057,141 — — — — — — — — — — — — — — — — — —			172,392	2,991,628	150,586		-		
January 7				3,175,109	247,276	4,057,141	_	_	
14	January		183,418	3,358,527	251,990	4,309,131	-	_	
February 4 104,025 3,033.554 154,008 4.831,000 — — — — — — — — — — — — — — — — — —			80,166	3,438,693	191,904	4,501,035	-	-	
February 4			59,900	3,498,602	175,996	4,677,031	-	_	
March    11		28 .	134,952	3,633,554	154,968	4,831,999	-	-	
March    18	February	4	164,625	3,798,179	139,730	4,971,729	_	_	
March    A		II	171,204	3,969,473		5,076,580	-	_	
March 4		18	130,227	÷,1≎8,700	68,567	5,145,147		_	
11		25	140,453	4,249,153	81,597	5,226,744	-	_	
April 18	March	4 . *	131,614	4,380,767		5,287,702	_		
April 1 5,008 4,537,119 18,167 5,301,488 — — — — — — — — — — — — — — — — — —		II	83,815	4,464,582		5,334,496	_	_	
April 1 5,608 4,542,727 27,928 5,410,416 — — — — — — — — — — — — — — — — — — —		18	47,718	4,512,300		5,373,321	_	_	
S		25	24,819	4,537,119	18,167		_	_	
15	April						_	_	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								_	
May 6							_	_	
May 6 . 10,154 4,591,031 25,112 5.505,176							-		
Inty  13							_	_	
June  20	May						_	_	
June  27								_	
June  3							_	_	
July 1	T						_	_	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	June						_	_	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								_	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							_	_	
8	Toly				-		_	_	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	July				1 552			_	
August 5 . 0.532 4.748,716 3.879 5.570,202							_	_	
August 5	August							_	
August 5 0.532 4.748.716 3.879 5.576,001 12 21.430 4.770,155 111 5.576,202 19 22,477 4.702,632 - 5.576,202							_	_	
12 21,430 4,770,155 111 5,570,202 19 22,477 4,702,032 - 5,570,202							_	-	
19 22,477 4,792,632 - 5,570,202							_	_	
							_	_	
$20 \dots 22,553  4,815,185  3,110  5,579,318  -  -  -$		26	22,553	4,815,185	3,116	5,579,318	_	_	
30 Adjusted			.555		<u> </u>	5.5.7.0			
Total) – 4,820,660 – 5,571,632 – –			-	4,820,660	_	5,571,632	_	-	

# STOCK OF COTTON AT ALEXANDRIA, EGYPT

In Cantars of 99.049 Pounds Each

(From statistics compiled by the Alexandria General Produce Association)

		D	ATI	Е						1917-1918	1918-1919	1010-1020	1920-1921
September	r 3									300,315	1,415,03.	830,496	
cepternise	10												520,544
	17									409,070			410,834
	24									430,435			439,279
October	1									590,904			484,923 536,995
	8												618,530
	1.5												738,784
	22									1,236,346			846,268
	20									1,381,655	,		936,360
November										1,491,783			950,500
	12									1,701,818		17 1	1,050,714
	10										. 07/11/1		1,186,700
	26									1,040.575			1,302,608
December	.3									2,220,010			1,305,353
	10									2,283,050			1,357,205
	17									2,378,239			-
	24									2,342,941			_
	31									2,305,022			_
January	7									2,417,400		1,808,310	
	1.1									2,534,398	0 00,,0	1,720,456	
	21									2,031,005	2,983,493	1,500,002	-
	28									2,050,017	2,805,803	1,532,183	_
February	4									2,059,043	2,961,386	1,386,871	_
•	11									2,713,289	3,057,064	1,332,040	_
	18									2,053,20)	3,005,450	1,215,424	_
	25									2,592,583	3,187,507	1,154,054	
March	-1									2,557,505	3,145,857	1,071,308	_
	11									2,522,680	3,074,735	1,058,020	_
	18									2,527,040	3,054,450	1,048,168	_
	25									2,448,400	3,010,211	999,363	_
April	I									2,431,648	2,890,648	974,473	_
	8									2,430,230	2,886,352	953,775	
	15									2,318,022	2,863,855	942,700	-
	22									2,280,457	2,821,860	914,838	_
_	20									2,307,394	2,729,077	890,083	_
May	0									2,300,704	2,664,558	870,605	-
	13									2,272,824	2,682,210	847,922	
	20									2,169,483	2,704,141	824,051	-
	27									2,198,884	2,570,543	810,250	_
June	3									2,177,002	2,607,160	788,693	_
	10									1,975,320	2,000,157	739,212	-
	17									1,749,366	2,013,275	724,981	-
r 1	24									1,725,988	2,508,284	710,472	-
July	I			-						1,723,846	2,412,160	666,600	_
	8									1,745,286	2,301,688	640,668	-
	15									1,713,250	2,216,710	623,878	_
$\Lambda_{ m ugust}$	2.2									1,727,325	2,084,532	624,837	_
	29									1,045,450	2,059,581	001,342	
	5									1,588,879	1,775,937	559,740	_
	12									1,530,410	1,742,042	545,730	_
	19							٠	٠	1,414,380	1,644,368	531,718	_
	26		•						•	1,405,664	1,559,477	519,371	-

# EXPORTS OF COTTON FROM ALEXANDRIA, EGYPT

In Cantars of 99.049 Pounds Each

(From statistics compiled by the Alexandria General Produce Association)

Week Ending		I	918-19	19	19-20	1920-21		
WEEK	ENDING	Week	Since Sept. 1	Week	Since Sept. 1	Week	Since Sept. 1	
Septembe	г з	56,791	-	_	_	-	_	
	10	121,705	178,497	111,458	111,458	8,200	8,200	
	17	77,374	255,871	79,193	190,651	19,811	28,020	
	24	95,378	351,240	130,305	320,956	16,143	44,163	
October	I	31,990	383,239	65,995	386,951	40,178	84,341	
	8	67,985	451,224	43,183	430,134	54,307	138,648	
	15	80,269	531,493	89,291	519,425	38,135	176,783	
	22	7,344	538,837	130,883	650,308	62,876	239,059	
	20	106,273	645,110	156,361	806,669	50,981	200,640	
November			645,110	53,572	860,241	105,915	396,555	
	12	36,134	681,244	263,823	1,124,064	93,729	490,284	
	10		681,244	236,878	1,360,942	74,652	564,936	
	26	112,888	794,132	291,460	1,652,402	78,913	643,849	
December	3	97,816	891,948	280,759	1,933,161	80,701	724,550	
	10	52,568	944,516	158,995	2,092,156	138,180	862,739	
	17	59,013	1,003,529	270,038	2,362,194	_	_	
	24	118,553	1,122,082	100,263	2,462,457	_	-	
	31	175,748	1,297,830	281,613	2,744,070	_	_	
January	7	131,546	1,429,376	199,742	2,943,812	-		
5	14	358	1,429,734	270,767	3,214,579		_	
	2I	192,175	1,621,909	308,790	3,523,369	_	_	
	28	222,552	1,844,461	219,447	3,742,816	_		
February	4	99,132	1,943,593	285,042	4,027,858	_	_	
	11	75,616	2,010,200	159,673	4,187,531	_		
	18	130,832	2,150,041	185,192	4,372,723		-	
	25	18,345	2,168,386	142,967	4,515,690	_	_	
March	4	173,324	2,341,710	143,644	4,659,334	_		
	II	154,937	2,496,647	50,136	4,709,470	_	_	
	18	57,994	2,554,641	58,683	4,768,153			
	25	79,057	2,633,708	66,972	4,835,125	_		
April	I	125,171	2,758,879	52,818	4,887,943	_		
-1	8	14,001	2,772,970	36,452	4,924,395			
	15	29,282	2,802,252	30,427	4,954,822	-		
	22	52,467	2,854,719	38,977	4,993,799		_	
	20	08,481	2,953,200	30,182	5,032,981	_		
May	6	80,673	3,033,873	38,590	5,071,571			
	13	15,451	3,049,324	50,958	5,122,520	-	_	
	20	22,810	3,072,143	37,637	5,160,166			
	27	139,646	3,211,789	18,765	5,178,931		-	
June	3		3,211,789	23,273	5,202,204	_	1100	
Jame	10	8,275	3,220,064	52,905	5,255,109	_	_	
	17	6,157	3,226,221	15,225	5,270,334	_	_	
	24	100,187	3,335,408	14,095	5,285,329	_	_	
July	I	08,416	3,433,824	43,872	5,329,201	_	_	
3 475	8	110,472	3,544,296	21,484	5,350,685		_	
	15	84,969	3,629,265	20,281	5,379,966	_	_	
	22	132,187	3,761,452	2,974	5,382,940	-	_	
	29	24,051	3,786,403	30,930	5,413,870	_	-	
August	5	293,176	4,079,579	45,481	5,459,351	_	_	
	12	55,334	4,134,013	14,121	5,473,472	_		
	19	120,151	4,255,064	14,012	5,487,484	_	_	
	26	107,444	4,362,508	15,463	5,502,947	_	-	
	31(Adjusted	-~/;++4	7,302,300	-314~3	3,31971			
	Total) .	_	5,426,662	_	5,582,978	_	_	
			J, 7 , 2		575-771-			

## EXPORTS OF EGYPTIAN COTTON FROM EGYPT, BY COUNTRIES OF DESTINATION, DURING EGYPTIAN COTTON SEASON, FROM SEPTEMBER 1 TO AUGUST 31

In Running Egyptian Bales

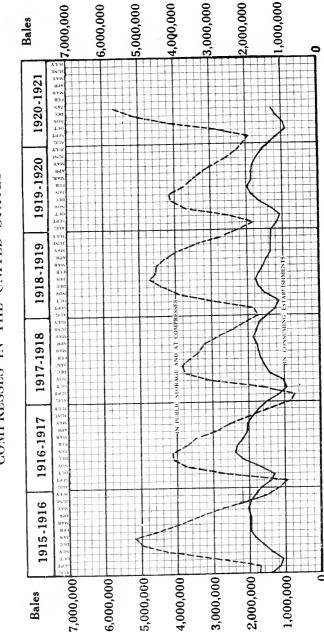
(Compiled by the Alexandria General Produce Association)

Austria										61 0161	1010-50
		100,340	105,020	107,412	111,824	1		1	1		,
Belgium		1,876	1,004	2,750	2,676	ı	1	ı	ı	1	812
Sngland		435,050	441,003	418,464	431,564	379,451	355,069	346,196	503,507	450,774	345,878
France		91,172		95,731	101,043	27,107	45,812	28.00,3	44,500	78,487	50,080
Germany		20,026		10,070	16,399	1	I	1	1		5,874
Sreece and Turkey	 	3,048		1,301	3.033	2,510	9	143	1,891	2,603	950
Holland		10,820	17,085	21,006	26,121	1	1	ı	ı	1	1,841
India		1,192	920	1,063	045	475	185	1	1	1	. 1
Italy		06,953	46.793	63,576	02,850	107,701	52,516	54,726	50,140	40,328	52,111
apan	 	17,423	18,839	21,450	10,863	18,169	25,801	20,082	18,218	22,100	14,256
ortugal		915	149		017	756	Soi	920	ı	05.5	003
Aussia		70,218	73.787		78,080	7.528	42,619	32,446	ı	ı	1
		22,478	21,695		20,581	23,204	20,332	12,534	110,011	10,430	8.805
sweden and Norway		525	66	4.31	280	31,442		ı	. 1	1	
United States		125,575	124,013	126,211	91,412	174,382	184,544	1,34,891	75,805	05,262	250,555
Other Countries	 	855	200	235	200	1	I	i	ı	OI	15
Total		984,381	965,184	968,883	070,203	832.731	728.310	010.010	71.1.182	718 300	2. C.

\* Statistics here given for 1910-11, 1911-12 and 1912-13 cover exportations from Alexandria only. In addition 33 bales were shipped in 1910-11, 247 bales in 1911-12, and 46 bales in 1912-13 via Port Said, Ismalia, and Suez.

Note.—This table shows only the destination of the cotton as given when the cotton was shipped from Egypt. Some of the cotton was reshipped from these countries of initial destination and was finally consumed in other countries. For example, some of the cotton reported here as taken by Great Britain was reshipped by the latter to the United States.

STOCKS OF COTTON IN CONSUMING ESTABLISHMENTS, IN PUBLIC STORAGE AND AT COMPRESSES IN THE UNITED STATES



The above chart is based on the statistics on the next page. In this compilation, American cotton is counted in running bales, foreign cotton in equivalent 500-pound bales. Linters are not included.

## STOCKS OF COTTON IN CONSUMING ESTABLISHMENTS, IN PUBLIC STORAGE AND AT COMPRESSES IN THE UNITED STATES

American Cotton is counted in Running Bales, Foreign Cotton in Equivalent 500-Pound Bales

## Linters are not Included

	101	91-5101	101	71-9101	161	81-4161	\$101	61-8161	101	1919-20	1920	1920-21
Ar Em of	Consuming Establish- ments	In Public Storage and at Com- presses	In Public Consuming Storage and at Com- Establish at Compresses meats presses	In Public Storage and at Com- presses	In Consuming Establish- ments	In Public Storage and at Com- presses	Consuming Storage and Establish at Comments	In Public Storage and at Com- presses	In Consuming Establish- ments	In Public Storage and at Com- presses	In Consuming Establish- ments	In Public Storage and at Com- presses
Aurost	180 201 1	102 615 1	261 696 1	200	200	r G	0	2				
· rubust	1,11,2,11,1	1,11111	1,500,0133	0/4/10	7/1/0/1/7	101.01	1,215,032	1,504,500	1,133,305	1,810,590	1,130,694	1,068,218
September .	111,000,1	2,805,15	1,328,368	2,014,305	059,152	1.575.786	1,185,781	2,081,228	c26,700,1	2,502,307	907,288	2,792,152
October .	1,345,820	1,170,543	1,721,990	3,667,840	1,075,859	3,031,080	1,499,327	3,041,045	1,365,130	3,687,141	943,851	4,167,992
November	1,013,041	050.1804	2,196,502	1,088,797	117,504.1	3,703,138	1,671,268	4,370,348	1,642,425	4,06,3,176	1,124,250	5,070,750
December	1,853,040	5,195,653	2,305,505	4,128,822	1,576,520	3,810,681	1.751.724	4.671,085	1,8,30,703	4,164,208	1,258,837	5,623,538
January .	000,170,1	4,543,949	2,300,038	3,725,700	1,055,179	3,000,002	1,670,383	4,504,228	1,052,326	3.758,320		1
February	1,08,4,821	3,970,799	2,167,843	3,431,150	1.695,955	3,300,400	1.557,654	4.537,411	1,800,308	3,530,054		1
March .	1.070.764	3,407,169	2,053,904	2,014,040	1.720,436	3,250,051	1,460,887	4.327,005	1,853,006	3,240,107		1
April	2,000,540	2,814,181	2,033,356	2,503,411	1,807,788	2,828,120	1,379,302	3,076,257	1,811,527	2,478,158		1
May .	7.075,085	2,143,251	1,800,151	1,051,012	1,703,205	2,404,223	1,301,321	3,116,007	1,608,833	2,586,868	ı	1
June .	1,8,35,050	1,520,370	1.713.527	1,402,403	1,673,120	2,110,103	1,363,049	2,705,771	1,554,271	010,105,2	1	1
July .	1,032,215	1,107,464	010,105,1	888,257	1,165,223	1.734,065	1,303,418	2,258,367	1,358,147	2,055,015	1	,

## TOTAL STOCKS OF COTTON IN THE UNITED STATES

The statistics given below include both American and foreign cotton, but not linters. American cotton is counted in running bales, foreign cotton in equivalent 500-pound bales. These totals include not only cotton in consuming establishments, in public warehouses and at compresses, but also the estimated amount in transit, in private storage, on plantations, and elsewhere. The entire new crop is considered as becoming a part of the stock in the country on August 31 of each year; hence the stock is at the maximum on that date each season.

These statistics are computed on the basis of the estimate which the Bureau of the Census makes at the beginning of each cotton season, *i.e.*, on August 1, of the "carry-over" from the old season. To this "carry-over" is added the new crop and the imports, and from this sum is deducted domestic consumption and exports. The balance is the estimated total stock in the country.

		1915-16	1916-17	1917-18	1918-19	1919-20	1920-21*
August	3 I	14,408,552	13,568,884	12,972,503	14,554,895	14,655,195	15,944,096
September	30	13,445,050	12,539,283	12,051,361	13,718,541	13,985,458	15,280,830
October	31	12,294,995	11,207,306	10,965,833	12,915,198	13,104,418	14,311,380
November	30	11,289,753	9,912,250	9.973.459	12,149,917	11,742,806	13,316,405
December	31	10,231,823	8,654.554	9,000,832	11,104,266	10,415,624	12,266,888
January	31	9,213,347	7,522,437	8,059,319	9,900,681	9,005,908	_
February	28	8,056,892	6,708,581	7,210,817	9,027,609	7,979,986	_
March	31	7,076,746	5,873,616	6,354,641	8,106,717	6,747,935	-
April	30	6,124,660	5,167,055	5,629,338	7,256,340	5,710,411	_
May	31	5,109,131	4,261,271	4,803,082	6,361,399	4,824,447	_
June	30	4,055,831	3,487,364	4,053,252	5,217,879	4,052,338	-
July	31	3,139,700	2,720,173	3,450,188	4,286,785	3,563,162	_

<sup>\* 1920-21</sup> figures are based on the December estimate of the 1920 crop, which was 12,987,000 bales.

## STOCKS OF COTTON AT PORTS ON JULY 31ST

New York Cotton Exchange Statistics. In Running Bales, including Linters

	1918	1919	1920
Galveston	. 125,368	202,569	109,086
New Orleans	. 316,425	376,121	228,017
Mobile	. 9,195	25,656	2,543
Savannah	. 154,588	249,092	58,898
Charleston	. 30,709	35,742	223,684
Wilmington	. 39,381	65,162	32,827
Norfolk	. 66,800	86,000	26,000
Baltimore	. 16,000	4,750	7,819
New York	. 103,410	81,494	43,446
Boston	. 19,404	8,687	7,193
Philadelphia	. 6,621	5,832	4,534
Brunswick	. 3,818	38,742	1,946
Pensacola	. ' –	4,038	-
Port Townsend	. 4,588	10,456	-
San Francisco	. , –	4	
Texas City, etc.	. 17,010	9,282	11,556
Jacksonville	. 10,364	19,283	2,341
Total	. 023,681	1,222,010	750,800

## STATISTICS OF COTTON IN GREAT BRITAIN

In 1000's of Bales

(From the Annual Circular of the Liverpool Cotton Association)

į	1 EAR	1840	1850	1860	1870	1880	1890	10-0001	1901-02	1902-03	1003-04	1004-05	1005-05	20-9061	1907-08	60-8061	01-6061	11-0161	1911-12	1912-13	1913-14	1914-15	1915-16	1916-17	81-2161	1918-19	1919-20
T END	Great Britain	584	622	794	247	180	1,179	506	591	434	365	1,080	820	1,242	7.24	1,118	520	7.24	1,087	904	1,225	1,815	506	585	200	000	1,100
STOCK AT END OF SEASON	Liverpoot	366	455	240	370	8/4	010	300	417	258	219	723	397	757	413	875	343	405	505	572	886	1,462	t <b>†</b> 9	268	251	620	1,015
Consumption	Average Weight of Bales	367	388	420	386	+++	475	500	408	405	502	507	492	500	508	500	488	408	503	201	161	964	497	505	500	521	503
Consu	Total	1,251	1,514	2,523	2,797	3,068	3,500	3,101	3.279	3,267	2,961	3,576	3,771	3.970	3.773	3,605	3,340	3.797	4,201	4,345	4,231	3,890	3,971	3,507	2,060	2,020	3,434
Exports	Total	120	272	800	658	531	477	375	402	587	528	497	248	637	636	510	548	557	642	527	4.37	605	<del>+0+</del>	204	3	75	440
	Average Weight of Bales	365	392	424	380	4.34	407	200	502	407	400	507	405	500	210	200	00+	503	507	500	465	504	513	512	512	510	207
	Total	1,599	1,749	3,366	3.462	3,640	4,010	3,630	3,859	3,696	3,438	4,708	4.055	5,012	3.877	4,484	3,267	4,500	5,230	4,737	4.876	5.130	3,611	3,392	3,139	3,166	4,462
	East Indian	210	308	503	1,063	570	<b>†</b> 09	128	99	180	255	6	224	231	200	182	272	252	100	130	504	277	154	96	211	84	200
Imports	Peruvian, etc.	2.2	9	01	112	73	99	55	19	43	53	80	93	101	122	135	125	127	151	193	546	502	197	161	143	105	202
	Egyptian, etc.	38	79	100	220	240	272	389	453	457	<b>†</b> 0 <b>†</b>	16†	479	570	546	533	375	603	200	165	570	559	557	44.2	†8 <del>†</del>	+1+	623
	Brazilian	85	172	10,3	40.3	123	150	39	219	1961	901	<del>1</del> 9	207	212	38	20	80	125	78	202	286	0+	10	17	25	1.3	20
	American	1,238	1,184	2,581	1,664	2,634	2,918	3,028	3,060	2,820	2,559	4,069	2,062	3,898	2,071	3,005	2,427	3,399	4.305	3,615	3,507	4,048	2,698	2,646	2,276	2,490	3,268
ν	1 EAR	1840	1850	1860	1870	1880	1890	10-0001	1001-02	1902-03	1903-04	1904-05	1905-06	1000-07	1907-08	1908-09	1909-10	11-0161	1911-12	1912-13	1913-14	1914-15	1915-16	21-9161	81-2161	01-8161	1919-20

Note.—Through 1890, the Import, Export, and Consumption figures were for year ending December 31; from 1900-or through 1913-14 the figures are for year ending July 31.

## STOCKS OF COTTON AND LINTERS IN THE UNITED STATES

American Cotton in Running Bales, Counting Round as Half Bales, Foreign Cotton in Equivalent 500-Pound Bales

tian	In Public Storage	67,306	71,340	75,320	79,978	84,903	102,799	66+,411	124,697	117,431	56,354	47,093	33,015	25,147	710,01	21,330	26,190	11,548	15,899	31,363	42,062	59,202	25,123	6,205	1,876	998	658	597
Egyptian	In Consuming Establishments	86,651	86,070	95,610	102,878	112,807	117,300	130,455	134,639	112,276	76,816	58,898	55.402	40,005	44.502	40,825	44.178	34,767	36,858	35,917	75,250	123,406	96,828	52,413	74,518	77,029	70,678	35,013
Sea Island	In Public Storage and at Compresses	8,648	8,753	8,571	8,650	9,103	9.791	10,844	9.943	14.330	18,017	21,616	21,448	56,399	27,084	28,592	57,809	24,084	31,538	36,494	19,912	10,870	4,678	7,453	(Not Available)	6,539	6,256	2,012
Sea I	In Consuming Establishments	9,229	10,173	11.751	12,066	13,250	14,654	15,534	18,318	19,625	22,879	22,191	22,190	17,768	15,072	13,551	15,707	17,867	19,487	20,000	36,482	27,454	24,919	21,028	968,61	23,753	19,280	21,866
Linters	In Public Storage and at Compresses	337,840	340,008	340,546	341,975	358,040	382,432	377,236	393,372	395,129	401,055	368,078	324,965	265,739	240,078	235.301	227,185	224,141	227,358	236,800	230,087	113,106	188,68	29,673	27,378	8,135	10,856	18,441
Lin	In Consuming Establishments	239,020	223,925	234,170	256,065	267,756	277,218	260,058	282,881	288,842	304,280	283,206	276,540	269,190	256,425	245,570	251,102	262,454	266,539	138,108	112,972	100,441	198,905	75,346	60,454	52,022	43,422	40,222
Total Cotton, Exclusive of Linters	In Public Storage and at Compresses	5,623,538	5,070,750	4,107,092	2,792,152	1,968,218	2,055,015	2,301,016	2.586,868	2,078,158	3,240,197	3,530,054	3,758,320	4,104,208	4,003,176	3,587,141	2,502,307	1,810,596	2,208,367	1,734,965	888,257	1,107,464	1,784,019	546,944	467,902	548,104	421,084	288,367
Total ( Exclusive	In Consuming Establishments	1,258,837	1,124,250	043.851	907,288	1,130,604	1,358,147	1,554,274	1,608,833	1,811,527	1,853,000	1,869,368	1,052,320	1,830,703	1,042,425	1,365,139	0.007,070	1,133,365	1,303,418	1,465,223	016,105,1	1,632,245	1,401,185	675,873	117,704	818,024	498,769	463,010
		. 0	. 0	. 02	. 0	. 0	. 0	. 0.	. 0	. 0	. 0	0.	. 0	. 6	. 61	. 61	. (2)	. 61	. 61	&		. 91	. 5	. +1		. 2.	. 11	. 0
	At End of	r 1920	2r 1920	1920	_	1020	1920	1920	1920	1920	1920	_	1920	r 1919	r 1919	1910	2r 1919	1919	6161	8161	161	1916	1915	101	1913	1912	1011	0161
	At .	Decembe	November	October	September	August	July	June	May	April	March	February	January	December	Novembe	October	Septembe	$\Lambda$ ugust	July	July	July	July	July	$\Lambda$ ugust	August	August	$\Lambda$ ugust	$\Lambda$ ugust

## WORLD'S VISIBLE SUPPLY OF COTTON DURING PAST SIX SEASONS

In Thousands of Running Bales. Linters Included (New York Cotton Exchange Statistics)

	1915	-16	1916	-17	1017	-18	1918	S-19	1919	-20	1920	)-2I
	General	American	General	American	General	American	General	American	General	American	General	American
Aug. 6	4,155 4,022 3,876	2,914 2,801 2,687	3,048 2,894 2,802	2,055 1,965 1,902	2,709 2,590 2,575	1,391 1,276 1,250	2,954 2,981 2,892	1,007 1,855 1,781	4,724 4,645 4,531	3,100 3,037 2,954	4,824 4,664 4,567	2,848 2,712 2,606
Sept. 3	3,760 3,727 3,817 4,032	2,587 2,607 2,698 2,929	2,747 2,820 2,927 3,129	1,015 2,045 2,104 2,400	2,495 2,535 2,533 2,579	1,268 1,312 1,388 1,485	2,975 2,987 3,016 3,089	1,832 1,852 1,895 1,981	4,45 <sup>2</sup> 4,344 4,194 4,074	2,878 2,782 2,730 2,070	4,462 4,440 4,373 4,351	2,578 2,532 2,522 2,519
Oct. 1 8	4.269 4.542 4.774	3,164 3,389 3,595	3,301 3,748 4,030	2,694 3,040 3,316	2,679 2,830 3,002	1,620 1,788 1,978	3,213 3,362 3,469	2,128 2,253 2,395	4,013 3,050 4,057	2,600 2,740 2,808	4,410 4,514 4,021	2,509 2,714 2,852
15 22 29 Nov. 5	4,983 5,126 5,221 5,326	3,780 3,924 4,038 4,152	4,295 4,611 4,798 4,982	3,575 3,741 3,973 4,114	3,204 3,380 3,550 3,645	2,155 2,339 2,543 2,666	3,000 3,748 3,900 3,084	2,510 2,669 2,851 2,966	4,250 4,412 4,015 4,848	3,005 3,245 3,463 3,700	4,799 5,038 5,129 5,315	3,026 3,269 3,448 3,671
12 19 20	5,441 5,545 5,624	4,258 4,326 4,383	5,164 5,324 5,461	4,261 4,371 4,467	3,071 4,145 4,231	2,800 3,043 3,110	4,088 4,227 4,275	3,056 3,142 3,160	5,053 5,222 5,402	3,022 4,088 4,227	5.796 5.937 6,087	3,876 4,011 4,184
Dec. 3	5,829 5,962 6,046 6,156	4,540 4,684 4,752 4,810	5,645 5,743 5,810 5,820	4.560 4.642 4.657	4,362 4,418 4,466	3,202 3,224 3,230	4,208 4,373 4,483 4,616	3,155 3,217 3,351	5,504 5,650 5,676 5,753	4.327 4.431 4.423 4.400	6,152 6,328 6,440 6,569	4,208 4,468 4,584 4,658
Jan. 7	6,140 6,211 6,173	4,779 4,757 4,697	5,811 5,736 5,677	4,650 4,594 4,518 4,475	4,597 4,027 4,005 4,054	3,291 3,310 3,328 3,317	4,689 4,721 4,931	3,446 3,453 3,461 3,638	5,870 5,875 6,110	4,505 4,552 4,080*	0,647 - -	4,706
21 28 Feb. 4	6,134 6,066 5,085	4,644 4,752 4,506	5.557 5.530 5.480	4.359 4.322 4.205	4.716 4.657 4.650	3,367 3,305 3,330	4.976 4.969 5.038	3,607 3,710 3,740 3,771	6,231 6,317 6,411	4,678 4,658 4,751 4,702		
11 18 25 Mar. 4	5,996 5,979 5,857 5,844	4,4 <sup>6</sup> 3 4,4 <sup>2</sup> 2 4,3 <sup>1</sup> 5 4,2 <sup>1</sup> 9	5,386 5,396 5,279 5,028	4,105 4,080 3,982 3,838	4,636 4,637 4,604 4,578	3,321 3,321 3,200 3,272	5,072 5,093 5,124 5.097	3,787 3,823 3,802	6,391 6,391 6,292	4,787 4,701 4,703	_	-
11 18 25	5,713 5,628 5,586	4,103 4,005 3,059	4,084 4,060 4,816	3,707 3,604 3,750	4,740 4,758 4,700	3,439 3,464 3,484	5,060 5,057 5,366	3,762 3,759 3,747	6,162 6,152 6,178	4,600 4.555 4,500		-
April 1 8 15 22	5,542 5,378 5,303 5,168	3,915 3,791 3,721 3,617	4,722 4,707 4,600 4,421	3,514 3,390 3,280 3,120	4,751 4,090 4,466 4,339	3,468 3,364 3,198 3,074	5,388 5,361 5,310 5,328	3,758 3,721 3,668 3,670	6,170 6,200 6,200 6,186	4,501 4,446 4,413 4,344	_	-
May 6 13	4,942 4,795 4,693	3,409 3,377 3,275	4,324 4,254 4,120	2,982 2,878 2,708	4,220 4,126 4,020	2,979 2,805 2,837	5,298 5,270 5,211	3.045 3.005 3.550	5,030 6,028	4,205 4,135 4,048	- - -	
June 3	4,535 4,402 4,235 4,081	3,150 3,041 2,908 2,778	3,046 3,811 3,667 3,554	2,600 2,480 2,374 2,255	3,044 3,877 3,797 3,729	2,757 2,654 2,587 2,535	5,220 5,183 5,199 5,218	3,516 3,482 3,499 3,537	5.008 5.873 5.767 5.643	4,000 3,870 3,754 3,035	- -	- -
July 1 8	3.989 3.831 3.716 3.605	2,699 2,615 2,505 2,405	3,497 3,406 3,283	2.183 2,088 1,998 1,831	3.058 3.010 3.470 3.389	2,402 2,303 2,278 2,200	5,192 5,155 5,107 5,040	3,501 3,447 3,396 3,364	5,564 5,445 5,286 5,246	3,516 3,397 3,275 3,222	- - -	
15 22 29	3,465 3,266 3,313	2,310 2,310 2,191 2,230	3,127 3,045 2,012 2,807	1,713 1,578 1,535	3,302 3,223 3,153	2,125 2,051 1,905	4,030 4,003 4,817	3,304 3,332 3,285 3,214	5,105 5,028 4,899	3,103 2,909 2,913	-	- - -
30	_	-	-	-	_	-	-	-	4,911	2,944	_	-

## COTTON CONSUMPTION, SPINNERS' STOCKS OF COTTON, AND ACTIVE AND IDLE COTTON SPINDLES OF THE WORLD AS OF JULY 31, 1920

The statistics on the five following pages, showing cotton consumption, spinners' stocks of cotton, and active and idle cotton spindles of the world, were compiled by the International Federation of Master Cotton Spinners' and Manufacturers' Associations from individual returns received from the mills. It will be noted that these returns are not complete for the entire industry of the world, as no returns whatever were received from Russia, which contains about 7,200,000 spindles, or from Austria, with its 1,300,000 spindles, and returns from some other countries, particularly Poland, did not cover all of the spindles in those countries. However, the total number of spindles in each country has been carefully estimated, and these estimates are given in each table, so that it is possible to see what percentage of the industry in each country is covered by the returns. It will be noted that, in the aggregate, returns were received from 129,985,519 spindles out of a total of about 154,200,000 in the world, and of the approximately 24,000,000 spindles from which no returns were received, about 8,500,000 were in Russia and Austria. It should be especially noted that in this compilation the spindles enumerated are raw cotton spinning spindles only, and the figures do not include doubling or waste spindles. These compilations, made by the International Federation, are the only ones covering this field made by any organization in the cotton trade, and although not 100 per cent. complete, they are by far the most authoritative.

# COTTON SPINNING SPINDLES OF THE WORLD, BY COUNTRIES, ON JULY 31, 1920

So far as reported to the International Federation of Master Cotton Spinners' and Manufacturers', Associations. For explanation of this table see page 26

COUNTRIES	Mule Spindles in work from which Returns were received	les Ring Spindles m in work from rns which Returns ed were received	Spindles spin- ning Egyptian Cotton from which Returns were received	Spindles spin- ning American, East Indian, and Sundry Cottons from which Returns were received	Spindles in course of Construction from which Returns were received	Spindles stopped at present ("telle" Spindles) from which Returns were received	Total Number of Active Spindles from which Returns were received	Total estimated Number of Spinning Spindles in each Country
Burope: Great Britain	30,301,318	8 10.651.581	15.307.031	21.618.87	100 000	000 000 1		200
France	2,077,518		1,208,858	4.449,772	104.831	1.576.250	5.043,902	59,092,410
Germany .	2,510,492	.,	474,920	4,756,070	1,800	3,528,744	5,230,006	0.100,000
Capellar Standillo	071.477	ri	389.254	3,543,039	30,256	162,409	3,932,893	4.514,800
Czeciio-alovakia Spain	903,857		150,042	1,423,815	ı	1,980,563	1,603,857	3.584,420
Belgium	000,00	-	23 136	1,500,000,1	1 4	1	* 000,000, I	1,800,000
Switzerland	S22,130	-	600.265	0.04444	1 202	sto.201	1,107,152	1.572,500
Poland .	20,278	3 07,568	30,112	87,734	37.000	111.202	1360340	1,530,074
Sweden	688,80		í	403,309	28,400	04,625	103,309	070.350
Holland	814,701	300.524	ı	503,942	24,002	1,000	503,042	507.012
Portugal	82,00		1	482,000	,	۸.	482,000*	182,000
Piniand	tbo*20	172,134	9.088	220,840	ı	ı	239,828	230,828
Denmark	0.750		ı	02,104	ı	24,240	02,101	110,611
Norway	12,58	5 +49.752	ı	02.340	920	4.312	62,340	72,724
Total	48,801,760	24,229,266	18.412.006	54.708,129	1,200,066	0,234,310	73,121,035	94,079,692
ASIA								
India .	987,030		13,275	5.305.328	52,343	185,750	5,318,003	0,689,680
China	39.17	3,110,000	280,240	2,800.031	85,000	534,869	3,155,271	3,600,000
							1,200,030	000,000,1
Total	1,027,102	8,720,808	200,515	0.454.305	137.343	720,620	0.753.910	11,079.770
AMERICA:								
Canada	3,255,000	32,241,000	3,000,000	32,100,000*	571,346	373,000	35,400,000	35,872,000
Mexico	10,002		ı	253,424	800	1 1	253,121	000,002,1
Brazil	000'1		ı	303,008	25,072	F	303,068	000,000'.I
Total	3.171.858	33,261,696	000,000,5	33,736,504	041,026	373.000	30.730,504	39.392,000
SUNDRIES.		of r'ot	1	otrot	1.400		oti'ut	250,000
GRAND TOTAL	53,303,670	06,263,010	21,712,421	97.945,168	2,030,435	10.327.030	110,657,580	145.701,462

\*Approximately. † In France there are alto either 1.000,000 spindles stopped. † There are, in addition, 1.200,000 doubling spindles in Germany. No replies have been received from 26 mills containing approximately 369,000 active spindles and 271,300 idle spindles.

## CONSUMPTION OF COTTON, PER THOUSAND ACTIVE SPINDLES, BY COUNTRIES, FOR YEARS 1909 TO 1913 AND 1920\*

In Running Bales, during Years ending August 31

(Compiled by the International Federation of Master Cotton Spinners' and Manufacturers' Associations)

								-
Cot	INTRIES		1909	1910	1011	1912	1913	1920
Great Britain .			65.82	63.50	70.47	77.27	76.80	63.65
Germany			173.64	165.69	165.23	167.61	151.00	92.70
Russia .			236.56	264.99	266.43	261.92	272.30	?
France			139.00	133.56	132.99	138.22	136.49	111.30
India			387.29	360.35	352.18	363.84	357-94	318.76
Austria .			184.45	176.54	172.08	180.10	170.52	?
Italy			235.38	192.44	214.66	224.33	171.73	170.54
Spain			172.15	148.83	179.17	170.39	179.35	216.67
Japan			611.43	684.88	716.98	662.04	690.63	660.30
Switzerland .			64.82	60.38	59.95	70.67	70.45	57.60
Belgium .			170.75	149.79	178.32	168.91	172.47	160.08
Sweden .			187.94	208.45	205.01	208.22	215.83	175.15
Portugal .			137.95	121.87	156.96	165.71	163.64	140.02
Holland			201.44	182.42	191.68	186.92	177.17	181.79
Denmark .			297.17	236.18	273.29	300.48	284.87	254.49
Norway			148.46	153.52	152.31	146.60	154.20	170.50
U. S. America .			183.03	166.04	162.65	177.00	183.65	181.00
Canada			146.72	150.08	138.83	148.20	132.70	173.93
Czecho-Slovakia .			_	_		_	_	61.03
Poland			-	280.54	326.58	352.23	312.80	64.52
Mexico .			224.36	216.97	203.18	176.85	226.99	174.80
Brazil			865.24	460.53	407.83	579.88	423.57	228.00
Finland			-	_	132.59	150.05	156.54	109.48

<sup>\*</sup> Owing to the war, the International Federation was unable to compile these statistics for the years 1914 to 1919, inclusive.

## CONSUMPTION OF COTTON, PER THOUSAND ACTIVE SPINDLES, IN THE UNITED STATES FROM 1914 TO 1920

In Running Bales, during Years ending August 31

(Compiled by the International Febration of Master Cotton Spinners' and Manufacturers' Associations)

YEARS	1914	1915	1916 1917	1018	1919	1920
Consumption	174.35	175.64	195.54 207.01	190.98	165.49	181.00

NOTE.—The United States is the only important cotton manufacturing country for which exact statistics of mill consumption are available for the years 1914 to 1919.

# COTTON CONSUMPTION OF THE WORLD, BY COUNTRIES, DURING THE YEAR ENDING JULY 31, 1920

So far as reported to the International Federation of Master Cotton Spinners' and Manufacturers' Associations. For explanation of this table see page 76.

Countries	Active and Idle Spinning	Active		WHICH RI	CACADEM OF ECONOMIC DADES OF COLON CONSUMED BY STINDESS PROMING. WHICH RETURNS WERE RECEIVED	ECLIVED	E W CTE C	Total estimated Number of
	Spindles from which Returns were received	Spindles from which Returns were received	American Cotton	East Indian Cotton	Egyptian Cotton	Sundries Cotton	Total Cotton	Spinning Spindles in each Country
EUROPE:								
Great Britain	107,540,15	50,045,002	2,020,785	51,129	389.062	124,338	3,185,314	58.602,110
France	7,234,880	5,058,030	514,072	43,835	53.751	141,81	620,700	0.100,000
Germany	0,750,740	5.230.900	355.977	73.700	14,407	40,758	110,484	0.100.000
Italy .	1,005,302	3.032,503	407,203	133,330	33,304	6,805	670,702	1.511.800
Czecho-Słovakia .	3,584,420	1,003,857	85.080	8,028	1,363	2.506	97,877	3.584,120
Spain	1,800,000	1,800,000	305,0001	10,000	25,000	1000,02	390,000	1,800,000
Seiglum Contraction	1,572,500	1,467,452	158.077	72,666	2,350	01.3	234.900	1,572,500
Poland	1,453,877	1,350,540	53.087	617,8	10,330	478	79.51.4	1.5 36,074
Smedius	0,00,00	0+0,021	0,258	1.784	7.2	70	8.184	1,100,000
Holland	100,024	103.300	00,023	1.328	ı	310	20,067	670,350
Destroy	507,013	503.012	29++42	22,034		1,47.3	107,975	507,012
1 Orthod	192,0001	195,0001	53.301	1.3	5.3	100'11	101'49	182,000
Finland	230,828	230,828	25,053	7.2	2,3.2	1	26,257	230,828
Vennark	110,011	101,101	23,403		ı	23	23,510	116,611
No. No.	00,052	05.340	10,142	127	ı	(	10,269	72,724
Total	82,355,345	73,121,035	4,864,679	453.774	530,044	229,885	0,087,382	01,079,692
ASIA								
India	5,504,354	5,318,603	300	1,084,105	2,170	8,400	1,605,365	6,689,680
China	3,000,140	3,155,271	708.704	006.011.1	20,002	203,837	2,083,433	3,600,000
	000000000000000000000000000000000000000	0,0			ı	190,305	000,308	1,000,000
Total	10, 17,1,530	0.753,010	139,184	2,8,34,005	23.372	022,635	4,100,190	11.070.770
AMERICA: II S. Amarica			4	-				
Canada	000,27,0,00	55.400,000	0,010,515	12,000T	242,8291	1000,0001	6,425,3448	35,872,000
Mexico	210,100	210,180	0110,440		ı	ı	118,440	1.200,000
Brazil	303,068	\$30,505	320	1 +	164	43.837	44.32I 75.552	720,000
Total	37,100,504	36,736,504	0,120,281	12,000	242,093	279,389	6,063,663	30,302,000
SUNDRIES	01140	otr'ut				16.700	16.700	250,000
GRAND TOTAL	120,085,510	119,657,589	11.703.144	3.200.770	SON TOO	1.428,600	17.236.011	1.15.701.162

\* Bales of 500 bls. 037,779 bales represent Chinese Cotton, some of the balance of 52,019 bales may be American,—the cable does not give details. § 334,327 linters in addition # Includes 43,243 bales Sea Island. † Approximately.

## MILL STOCKS OF COTTON, PER THOUSAND ACTIVE SPINDLES, BY COUNTRIES, FOR YEARS 1909 TO 1913 AND 1920\*

In Running Bales, on August 31

(Compiled by the International Federation of Master Cotton Spinners' and Manufacturers' Associations)

		1		1		
Countries	1909	1910	1911	1912	1913	1920
Great Britain	6.93	4.47	4.27	7.40	6.82	7.69
	, ,					
Germany	33.13	26.98	23.66	28.24	24.79	28.50
Russia	60.88	57.57	67.21	77.20	61.04	
France	26.07	19.63	18.54	21.50	22.35	26.34
India	108.15	86.97	85.78	110.09	104.34	147.23
Austria	42.81	31.97	30.06	35.60	31.42	
Italy	43.35	30.10	36 <b>.0</b> 8	36.74	28.30	56.50
Spain	49.54	27.55	19.77	20.15	20.38	11.11
Japan	196.55	161.69	174.12	278.21	255.45	333-34
Switzerland	12.15	9.17	9.64	16.77	14.23	26.25
Belgium	37.90	27.37	32.27	36.62	29.75	46.21
Sweden	46.78	44.28	36.24	30.79	38.12	54.25
Portugal	17.88	20.17	19.72	20.73	17.26	10.76
Holland	22.79	22.31	21.23	23.68	24.78	48.63
Denmark	9.61	13.33	18.10	17.52	14.77	27.47
Norway	21.72	26.27	23.36	29.66	23.95	70.00
U. S. America	32.68	18.27	18.11	28.73	24.66	38 22
Canada	33.10	11.36	11.07	53.95	32.92	49.38
Czecho-Slovakia	-	_	-	_	-	22.47
Poland	-	48.40	83.15	101.24	90.75	15.78
Mexico	44.52	34.02	42.75	29.53	24.63	45.20
Brazil	95.24	81.24	62.80	108.02	108.76	55.72
Finland	_	-	11.22	22.98	21.32	16.50

<sup>\*</sup>Owing to the war, the International Federation was unable to compile these statistics for the years 1014 to 1919, inclusive.

## MILL STOCKS OF COTTON, PER THOUSAND ACTIVE SPINDLES, IN THE UNITED STATES FROM 1914 TO 1920

In Running Bales, on August 31

(Compiled by the International Federation of Master Cotton Spinners' and Manufacturers' Associations)

YEARS	1011	1915 1916	1917 1918	1919	1920
Mill Stocks	21.13	43.93 49.84	45.76   42.64	37.50	38.22

Note.—The United States is the only important cotton manufacturing country for which statistics of mill stocks are available for the years 1914 to 1919.

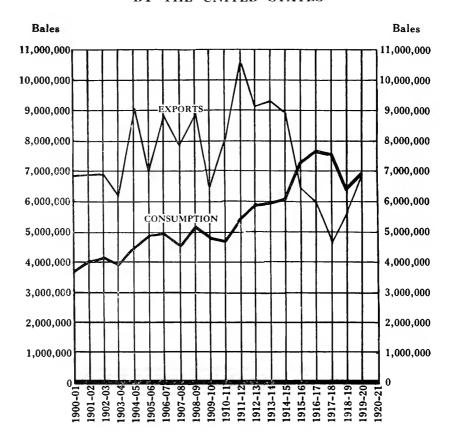
SPINNERS' STOCKS OF COTTON IN THE WORLD, BY COUNTRIES, ON JULY 31, 1920

So far as reported to the International Federation of Master Cotton Spinners' and Manufacturers' Associations. For explanation of this table see page 76.

P. Arraman Pro-	Number of Active and Itle Spinning	Number of Active Spinning	NUMBER	NUMBER OF RUNNING BALES OF COTTON HELD BY SPINNERS FROM WHOM RETURNS WERE RECEIVED	NING BALES OF COTTON HELD BY WHOM RETURNS WERE RECEIVED	HELD BY SPINN ECEIVED	ERS FROM	Total estimated Number of
CUBNIKIES	Spindles from which Returns were received	Spindles from which Returns were received	American Cotton	East Indian Cotton	Egyptian Cotton	Sundry Cotton	Total Cotton	Spindles in each Country
EUROPE: Great Britain	101 219 12	000	190 020	i ye or	191	11000	. 60.	200
France	7,234,880	5,658,630	88,021	20,202	23,000	11,010	420,456	0,100,000
Germany	8.750.740	5.230,000	36,406	17,542	2,450	000,11	08,397	000'001'6
Italy	4,095,392	3.932,893	130,271	76,400	11,847	3,619	222,197	4,514,800
Czecho-Slovakia	3,584,420	1,603,857	20,837	4,860	247	1,002	36,036	3,584,420
Spain	1,500,000	1,800,000,1	13.7507	1,000,1	7501	1,5007	1000°	I,800,000
Switzerland	1,572,500	1,407,452	30,451	30,345	5+8	1++	07,815	1,572,500
Poland	20000000000000000000000000000000000000	018.001	2001	0,940	1,055	+ 2+ -	3003	1,000,001
Sweden	468,024	103,300	20,123	1,582	274	181	21,880	670,350
Holland	507,042	503.042	12,370	14,035	ı	1,576	28,881	597,942
Portugal	182,000†	182,000†	2.034	00	11	2,120	5,185	482,000†
Finland	230,828	230,828	3.788	011	28	ı	3.956	230,828
Denmark	tto'011	03,404	2,538	1	1	1	2,5,38	119,611
Norway	66,652	05,340	4,095	269	1	1	4,364	72,724
Total	82,355,345	73,121,035	047.774	108,411	11,844	63,445	1,051,474	01,070 002
Asix:								
India	5,504,354	5,318,603	99	785,258	5.4.1	2,188	783,056	6,689,680
Japan China	3,000,140	3,155,271	205.750	749,807	15,910	20,254 ISO,738*	1,051,781	3,090,090 1,000,000
Total	10,474,530	0,753,010	205,810	1,530,125	16,454	173,180	1,085,575	077.070.11
AMERICA:	1		4000	-1	40 2 2	0	11 11 11 11 11 11 11 11 11 11 11 11 11	0
Canada	55,5/2,000	081,012	33,631	1,3001	10,150	loo/*et	33,631	35,572,000
Mexico	253,424	253,424	351	1 1	000 -	11,011	11,455	720,000 I,600,000
Total	37,109,504	36,730,504	1,241,601	4,300	96,248	78,107	1,420,256	30.302,000
SUNDRIES	46,140	oti'ot			1	12,600	12,600	250,000
GRAND TOTAL	129,985,519	119,657,589	2,155,191	1.732,836	254,546	327,332	4,409,905	145.701.,162

\* Bales of 500 lbs. 134,496 bales are Chinese Cotton, some of the balance of 16,242 bales may be American—the cable does not give details. § 274,741 linters in addition. ‡ Includes 14,654 bales Sea Island. † Approximately.

## CONSUMPTION AND EXPORTS OF COTTON AND LINTERS BY THE UNITED STATES



The above chart is based on the statistics given on the next page. It shows the consumption and exports of cotton and linters by the United States, in terms of equivalent 500-pound bales, as compiled by the United States Bureau of the Census. The years as given are the official cotton seasons. Through 1913-14 the seasons were from September 1 to August 31. Starting with 1914-15, they have been from August 1 to July 31.

## CONSUMPTION AND EXPORTS OF COTTON AND LINTERS BY THE UNITED STATES

The statistics below are in equivalent 500-pound bales. The years as given are the official cotton seasons. Through 1013-14 the seasons were from September 1 to August 31. Starting with 1914-15, they have been from August 1 to July 31.

## (Compiled by the United States Bureau of the Census)

Cotton Season	Consumption	Exports
1000-01	3.603.516	6,806,572
1901-02	4,080.287	6,870,313
1902-03	4,187,076	6,913,506
1903-04	3.980,507	6,233,682
1904-05	4,523,208	0,057,397
1905-06	4,877,465	6,975,494
1906-07	4.074.100	8,825,236
1907-08	4.493,028	7,779,508
1908-09	5.198,963	8,889,724
1909–10	4.759.304	6,491,843
1910-11	4,713,120	8,025,991
1911-12	5,400,005	10,681,332
1912-13	5,867,431	9,100,003
1913-14	5.942,808	9,256,028
1914-15	0,087.338	8,931,253
1915-16	7,320,598	6,405,993
1916-17	7,721,354	5,963,682
1917–18	7,555.101	4.587,000
1918-19	6,288,922	5,063,920
1919-20	6,807,817	0,760,887

1

# CONSUMPTION OF COTTON IN THE UNITED STATES, MONTH BY MONTH

## In Running Bales, Exclusive of Linters

August 483,193 September 457,647 October 399,837 November 332,957 December 294,851	
August	August 497,316 September 556,041 November 556,041 November 511,711 Jamuary 591,021 February 551,021 April 566,914 May 555,155 July 525,489
August	August 569,488 September 522,389 October 84,046 November 560,427 December 516,408 January 523,947 February 510,084 March 571,443 April 544,125 May 575,802 June 515,823
August 383,680 September 414,864 October 451,890 November 426,766 January 467,862 February 463,307 March 524,867 April 514,009 May 463,798 June 514,655 July 496,846	August 1915–16  August 464,392 September 505,753 October 505,702 November 514,743 December 555,005 January 542,081 February 542,081 February 545,081 April 531,714 May 575,566 June 550,597
September	I913-14 September 442,435 October 511,923 November 456,336 December 456,202 January 455,231 March 493,335 April 499,446 May 496,744 June 448,333 August 383,680

## CONSUMPTION OF COTTON AND LINTERS IN THE UNITED STATES

American Cotton and Linters in Running Bales. Foreign Cotton in Equivalent 500-Pound Bales

Indian	Monthly Statistics on Consumption of Indian Cotton not available	8,232 4,681 2,176 2,176 3,986 3,816 4,801 2,412 0,841 0,793 11,766
Chinese	Monthly Statistics on Consumption of Chinese Cotton not available	10X
Peruvian	Monthly Statistics on Consumption of Peruvian Cotton not available	36.077 9,128 8,502 12,800 19,886 19,530 13,003 11,003 11,003 10,530 8,903 8,903 10,530
Egyptian	7,219 10,236 12,866 10,555 26,154 33,633 37,511 33,630 34,633 31,578 34,630 24,980 24,980 24,980 26,173 27,361 28,173 28,	323,124 126,087 136,401 259,160 259,160 260,324 181,211 151,201 201,200 180,405 147,102 130,728
Sea Esland	202,1 1,100 1,110 1,110 2,000 1,000	42,971 51,183 85,930 04,201 82,045 79,304 81,673 54,778 04,856 64,237 75,005
Total Cotton (Including Linters)	316,409 361,313 438,674 494,768 519,003 563,604 597,310 607,386 597,311 607,386 512,502 610,703 516,70	6,762,207 6,223,837 7,685,329 7,658,207 7,278,529 6,009,207 5,884,733 5,786,330 5,367,583 4,704,078 4,704,078
Linters	21,618 39,137 37,121 36,800 37,575 37	342,473 457,901 1,115,840 8(0,702 880,916 411,845 307,325 307,325 303,237 206,561
Foreign Cotton	10,527 13,868 13,868 18,432 25,545 33,201 40,417 40,417 40,417 40,417 40,417 41,682 41,632 41,632 41,632 31,830 31	416,741 176,116 183,704 318,261 316,995 122,657 104,309 23,2,020 207,663 175,430
American Cotton (Excluding Linters)	284,324 318,189 381,405 432,102 432,102 485,002 485,002 485,002 485,002 483,870 555,024 470,207 470,207 470,207 470,207 470,207 470,207 470,207 470,207 470,207 470,207 470,207	6,002,003, 5,580,820 6,382,005 6,470,244 6,080,618 5,375,305 5,375,305 4,921,683 4,921,683 4,422,987 4,452,987
Total Cotton (Excluding Linters)	204,851 332,057 399,837 457,647 453,103 525,480 555,155 541,37 506,014 591,250 515,000 591,250 556,041 491,250	0,410,734 5,765,930 0,566,489 0,788,505 0,397,013 5,597,302 5,577,408 5,129,340 1,498,417 4,621,742
Perton	Month of:  December 1920 November 1920 October 1920 September 1920 August 1920 Juny 1920 Juny 1920 March 1920 March 1920 March 1920 Pebruary 1920 Jenuary 1920 December 1919 November 1919 September 1919 September 1919 August	July 31, 1020 July 31, 1020 July 31, 1010 July 31, 1016 July 31, 1017 July 31, 1017 July 31, 1017 August 31, 1014 August 31, 1013 August 31, 1011 August 31, 1011

## COTTON CONSUMED IN THE UNITED STATES, BY STATES\*

In Running Bales, Exclusive of Linters

	1101	1912	1913	1914	1015	9161	7101	8161	1919	1920
New England States:										
Maine	151,572	166,537	175,240	181,262	176,088	103,534	187,150	185,418	157,414	104,431
Vermont	259,413	204.030	305,302	300,881	297,040	294,066	317,881	310,478	267,501	204,289
Massachusetts	1,133,919	1,254,752	1,324,955	1,347,778	1,282,0,37	1,402,888	15.545	12,225	11,078	12,002
Khode Island	213,895	125,198	120,048	241,443	248,242	279,233	201,003	296,013	270,297	305,240
							† n n n n n n n n n n n n n n n n n n n	=6110C1	0701+71	155,050
Total New England States	1,882,060	2,076,405	2,178,237	2,2 9,197	2,149,398	2,388,726	2.414,372	2,102,520	2,165,031	2,397,126
Other Non-Cotton-growing States:										
New York	172,297	102,844	210,346	211.158	205.038	328.718	1808:0	010	3.000	
New Jursey	50,085	58,335	57.788	57,380	57,004	02,004	130,52	015.01	100.00°	233,729
Fennsylvania Mendend	47,517	920'81	52,177	48.727	14,801	40.203	53,150	10,000	37,180	41,730
Indiana	57,090	08,842	72,400	05,257	60,017	85,514	81,161	72,090	160,50	66,364
Illinois	2++;11	8 100	17,350	10,01	18,909	18,500	010'11	17,138	14.525	14,472
Others	18,800	21,604	22.070	22.210	11,010	13,007	14,220	12,718	11,643	13,006
					SO SECT	+11101	011,72	70,101	te\$'07	33,304
Total Other Non-Cotton-	29:	- 30				9	_	1		
FIGHTIS CONCES.	2011,222	t00,714	445.341	1,32,017	120,095	451,359	485,785	148,004	401,878	430,680
Catton-growing States:										
Virginia	73,824	SI,107	88,54.4	85,566	97,714	112,396	110,064	07,457	07,264	112,717
South Carolina	002,459	810,555	869,915	000,177	910.154	1,067,288	070,002,1	1,183,275	1,035,717	1,149,241
Georgia	157,170	050,027	709.905	20,1078	\$11,504	014.532	962,566	888,218	104,704	843,924
Alabama	722 027	705,646	100,150	032,332	059,853	707,789	907,015	824,078	702,070	S00,001
Mississipri	21770	202304	204,420	207.335	297,277	340,233	300,050	374,792	326,773	367,468
Tennessec	01,125	50530	7 1 2 20	50,055	32,300	35,542	38,047	30,040	32,045	36,425
Kentucky	17,268	25.033	21.153	71 627	50,500	707.00	100,702	219'101	92,052	105,373
Louisiana	8,758	12,051	13.5.15	15.007	25.190	25,500	25,231	20,027	15,071	19,003
Texas	30.277	10.108	10.00	12,002	20.70	30,50	55,501	37,100	34.147	39,543
Others	14.931	21,960	22,082	20,050	31,627	30.783	37,021	20.084	35.002	04,333
						0-1160	216110	600406	066:00	100
Total Cotton-growing States .	2,249,135	2,635,877	2,861,743	2,025,204	3,020,069	3.527.528	3,888.348	3,607,008	3,190,027	3,582,019
TOTAL UNITED STATES	4,498,417	5,129,340	5,483,321	5,577,408	5,507,362	6,307,013	6,788,525	6,566,180	5.765.030	6.110.731

\*Statistics here given from 1911 to 1911 inclusive are for years ending August 31st. Statistics from 1915 to 1920 inclusive are for years ending July 31st.

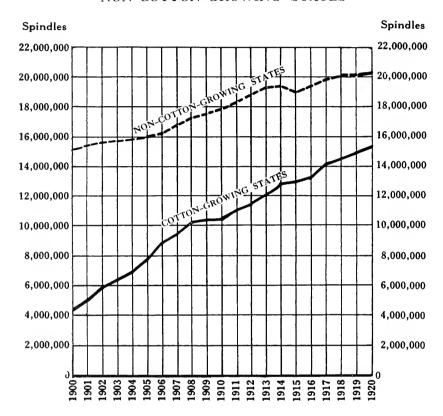
# SUPPLY AND DISTRIBUTION OF COTTON AND LINTERS IN THE UNITED STATES

[The statistics for 1015 to 1920 relate to the 12 months ending July 31, and those for prior years to the 12 months ending August 31. Quantities are given in running bales except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales]

(Compiled by United States Bureau of the Census)

	orgi	1101	1912	1913	1914	1015	9161	1017	8101	1010	0.01
Supply. Aggregate	88.0	0	C								0261
On hand at bootinging of some	120,001,21	15,073,423	17,890,220	16,275,734	16,492,408	18,913,660	16,072,805	840,000,01	16,076,558	17,098,430	18,018,306
total In consuming establish-	1,483,585	I,040,040	1 375,031	1,776,885	1,648,438	1,547,448	4,324,800	3,403,250	3,173,832	3.800.105	683
ments, total In cotton-growing states. In all other states In public storage and at	907,007 180,458 720,630	533,232 121,349 411,883	542,191 101,114 441,077	870,646 241,611 629,035	778,158 234,509 543,049	989,980 347,664 642,316	1,600,000 073,731 026,350	1,732,686 718,117 1,014,569	1,614,888 667,160 947,728	1,603.331 040,838 962,403	1,569,957 749,621 820,336
compresses	325,000	306,868	432,840	556,230	405,280	457,468	1,874,800	1,220,570	1,118,044	1,971,774	2,435,725
Net imports Ginnings To balance distribution Distribution	151,395 10,350,978 202,003	231,101 12,384,248 217,944	220,268 10,008,030 222,001	225,460 14,159,078 114,311	265,646 14,290,320 288,004	363,595 16,738,241 204,370	420,995 12,012,813 214,197	288,486 12,664,078 250,228	217,381 12,344,66,4 340,681	315,000 197,201 12,816,716 194,417	1,150,000 682,911 11,920,625 259,148
Aggregate	12,188,021	13,873,423	17,896,226	16,275,734	16,492,408	18,913,660	16,672,895	16,606,048	16,076,558	051,000,11	18,018,360
Exported Consumed, total	0,339,028	7,781.414	10,081,758	8,800,966	8,014,839	8,514,503	0,101,110	5.7 30,000	4.476,124	5,663,920	6.508.317
In cotton-growing states In all other states	2,292,333	2.376.40I	2,712,223	2,900,518	3.023.415	3,103,353 2,815,854	7,275,520 3,077,130 3,301,300	7,058,207	7,085.320	6,223,837	0,762,207
On hand at end of year, total In consuming establish-	000'01	12,000	70,000 1,776,885	10,000	45,000 1,647,836	35,000	100,000	35,000	25,000	5,155,052	\$5.047,504 \$5,000
ments, total In cotton-growing states In all other states In public storage and at	533,232 121,349 411,883	542,101 rol.111 441,077	870,646 241,611 629,035	778,158 234,500 543,640	751,219 213,418 537,801	1,000,000 073,731 020,350	I,732,686 718,117 I,014,569	1,614,888	1,603.331 040,838 962,403	1,569,057	1,635.365
Compresses Elsewhere (estimated)	300,808	432,840	556,230 350,000	405,280	576,617 320,000	1,871,800	1,220,570	1,118,044	1,071,774	2,435,725	2,437,447

## ACTIVE COTTON SPINDLES IN COTTON-GROWING AND NON-COTTON-GROWING STATES



The above chart is based on the statistics given on the next page. It shows the number of active cotton spindles in cotton-growing and non-cotton-growing states of the United States. The lower curve (solid line) indicates the spindles in cotton-growing states. The upper curve (broken line) indicates the spindles in non-cotton-growing states. It will be noted that the two curves converge sharply, indicating that the South is rapidly overtaking the North in cotton manufacturing.

## ACTIVE COTTON SPINDLES IN COTTON-GROWING AND NON-COTTON-GROWING STATES

(From statistics compiled by United States Bureau of the Census)

Year		Cotton-Growing States	Non-Cotton- Growing States
1000		4,367,688	15,104,544
1901	- v - * ·	5,000,000	15,400,000
1902		5,800,000	15,600,000
1903		0,200,000	15,700,000
1904		6,800,000	15,900,000
1905		7,631,331	16,056,164
1906		8,994,868	16,255,228
1007		9,527,964	16,847,227
1908		10,200,003	17,304,519
1909		10,420,200	17,589,105
1910		10,494,112	17,772,750
1011		11,084,623	18,437,974
1912		11,582,860	18,995,659
1913		12,227,220	19,292,540
1914		12,711,303	10,396,269
1915		12,955.712	19,008,523
1910		13,382,065	19,423,818
1917		14,155,758	19,733,077
1918		14,529,063	20,013,602
1919		14,846,239	20,084,695
1920		15,230,983	20,249,070

Note.—Statistics for 1001, 1002, 1003, and 1004 are estimates, as the Government did not take any census in these years.

# WORLD'S MILL CONSUMPTION OF COTTON, BY COUNTRIES, FROM 1909 TO 1919

(The statistics from 1900-10 1912-13 were compiled by the United States Bureau of the Census. For those years, the quantities for the United States are given in running balcs, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included. For other countries the quantities are given in equivalent 500-pound bales. The statistics from 1914-15 to 1918-19 are taken from Cotton Facts, and are in terms of bales of 500-pounds gross. Linters are also included for these years. No estimates are available for 1913-14.)

8 1918-19	6,250,000 00 3,050,000 00 40,000 00 125,000 00 800,000			1,75,000 1,800,000 750,000 1,800,000 1,900,000 1,75,000 1,75,000 1,75,000 1,75,000
1017-18	7,734,620 3,000,000 50,000 500,000 080,000	30,00 (500,00 450,00 5,00	50,00 50,00 10,00	1,760,000 1,750,000 1,750,000 375,000 250,000 155,000
71-9161	7,725,000 3,750,000 100,000 1,700,000 1,000,000	50,000 750,000 425,000 10,000 75,000	100,000 50,000 20,000 20,000	1,720,000 1,800,000 (000,000 330,000 230,000 80,000
91-2161	7,325,000 4,120,000 800,000 2,070,000 1,025,000	390,000 900,000 400,000 20,000	120,000 (0,000 100,000 32,000 17,000	1,60,300 1,670,000 525,000 325,000 225,000 85,000
1914-15	0,122,000 3,045,000 2,000,000 1,800,000 1,200,000	\$50,000 * 720,000 400,000 250,000 *	135,000 (10,000 130,000 32,000 16,000	1,715,000 1,400,000 5.25,000 3.20,000 150,000 75,000
1012-13	5,786,000 4,140,000 1,800,000 1,700,000 1,025,000	\$20,000 \$00,000 350,000 240,000	115,000 75,000 83,000 25,000 11,000	1,702,000 1,372,000 308,000 285,000 125,000 125,000
1911-12	5,367,000 4,250,000 1,795,000 1,650,000 1,014,000	830,000 920,000 330,000 222,000	100,000 70,000 83,000 25,000 11,000	1,705,000 1,100,000 360,000 180,000 125,000 115,000
11-0161	4,705,000 3,782,000 1,085,000 1,625,000 960,000	740,000 700,000 315,000 217,000	95,000 05,000 74,000 21,000 11,000	1,650,000 1,000,000 350,000 370,000 1110,000 140,000
1,007-10	1,799,000 3,372,000 1,000,000 1,457,000 951,000	785,000 753,000 205,000 180,000 102,000	80,000 58,000 74,000 10,000 11,000	1,653,000 1,028,000 315,000 370,000 110,000 140,000 55,000
	United States United Kingdom Germany Russia France Austria-Hungary, Czecho-	Slovakia, etc. Italy Spain Belgium Switzerland	Sweden Portugal Netherlands Denmark Norway Other European Countries	India Japan China Brazil Canada Mexico All other countries

\*These statistics are the estimates for ror3-14 but are used for 1914-15 as the only estimates available for the opening year of the war.

18.321,000 + 19,013,000 + 20,587,000 + 21,542,000 + 22,150,000 + 20,785,000 + 18,379,000 + 17,058,000 + 18,379,000 + 17,058,000 + 18,379,000 + 18,

Total

## ESTIMATED COST PER SPINDLE OF FOUR DIFFERENT MILLS COMPLETE, FOR THE YEARS 1910 TO 1921 IN-CLUSIVE, ON OR ABOUT JANUARY 1 OF EACH YEAR

(Compiled by Lockwood, Greene & Co.)

VEARS	Carded Yarn Mill	Carded Yarn and Cloth Mill	Combed Yarn Mill	Combed Yarn and Cloth Mill
1910	\$11.60	\$18.55	\$13.00	\$23.00
1011 .	11.10	18.30	12.75	22.20
1012	10.05	18.10	12.60	10.85
1913 .	11.40	10.35	12.00	21.10
1014	11.50	10.50	12.05	21.20
1015 .	14.10	21.15	15.30	23.10
1916 .	16.05	27.00	17.55	20.05
1017 .	19.80	34.45	21.05	30.45
1018	23.60	41.20	25.70	43.45
1919	28.30	48.95	30.90	51.75
1020	31.85	50.30	34.90	59.55
1921	37.10	64.75	40.70	07.50

Note.—In order to make the costs for all the years strictly comparable, they were all computed to apply to a mechanically driven mill of slow-burning mill construction of the type which was standard in 1910. Since 1910, changes have been made in mill construction and operation, the most important improvements being:—

- (1) Most mills are now built to be electrically driven instead of mechanically driven as was the case ten years ago.
  - (2) Higher story heights are now used.
  - (3) Wider bay spacings are now used.
  - (4) Most mills are now concrete instead of slow-burning mill construction.

If the costs for recent years were computed to apply to a mill with these improvements, they would be somewhat greater than those given above.

The above costs are subject to variation on account of location and type of buildings, and should not be applied directly to any individual plant.

The above costs are on the basis of a 50,000-spindle mill in each case.

## ESTIMATED COST ON JANUARY 1, 1911, AND JANUARY 1, 1921, OF ERECTING AND EQUIPPING A SPINNING MILL OF 50,000 RING SPINDLES USING AMERICAN COTTON AND SPINNING NUMBER 32'S WARP AND 50'S FILLING

(Compiled by Lockwood, Greene & Co.)

	1911	1921
Mill buildings (including warehouse)	\$136,900	\$505,000
Fire protection	10,400	41,600
Lighting	5,200	22,500
Heating and humidifiers	10,000	46,900
Shafting and transmission	9,200	17,700
Belting and ropes	6,500	18,300
Supplies and miscellaneous equipment (including machine shop)	27,500	65,000
Power plant complete (including chimney)	55,600	116,200
Textile machinery	240,000	765,500
Freights	10,000	17,000
Engineering and contingencies	50,700	240,000
Totals	\$556,000	\$1,856,000

Note.—In order to make the 1911 and 1921 costs strictly comparable, the 1921 costs were computed to apply to a mechanically driven mill of slow-burning mill construction of the type which was standard in 1911. Since 1911, changes have been made in mill construction and operation, the most important improvements being:—

- (1) Most mills are now built to be electrically driven instead of mechanically driven as was the case ten years ago.
  - (2) Higher story heights are now used.
  - (3) Wider bay spacings are now used.
  - (4) Most mills are now concrete instead of slow-burning mill construction.

If the 1921 costs were computed to apply to a mill with these improvements, they would be somewhat greater than those given above.

The above costs are subject to variation on account of location and type of buildings, and should not be applied directly to any individual plant.

## ESTIMATED COST ON JANUARY 1, 1911, AND JANUARY 1, 1921, OF ERECTING AND EQUIPPING A WEAVING SHED CONTAINING 1,359 LOOMS TO WEAVE PRINT CLOTHS 32 INCHES WIDE, 64 x 64 THREADS PER INCH

(Compiled by Lockwood, Greene & Co.)

	1101	1921
Mill buildings (including warehouse)	\$140,700	\$540,000
Fire protection	10,500	45.900
Lighting	5,600	29,100
Heating and humidifiers	000, I I	30,800
Shafting and transmission	9,300	15,000
Belting and ropes	7.000	10,300
Supplies and miscellaneous equipment (including machine shop)	20,500	50,000
Power plant complete (including chimney)	56,200	114,000
Textile machinery	300.000	344,000
Freights	000, I I	13,200
Engineering and contingencies	58,200	187,000
Totals	\$030,000	\$1,140,000

Note.—In order to make the 1911 and 1921 costs strictly comparable, the 1921 costs were computed to apply to a mechanically driven mill of slow-burning mill construction of the type which was standard in 1911. Since 1911, changes have been made in mill construction and operation, the most important improvements being:—

- (1) Most mills are now built to be electrically driven instead of mechanically driven as was the case ten years ago.
  - (2) Higher story heights are now used.
  - (3) Wider bay spacings are now used.
  - (4) Most mills are now concrete instead of slow-burning mill construction.

If the 1921 costs were computed to apply to a mill with these improvements, they would be somewhat greater than those given above.

The above costs are subject to variation on account of location and type of buildings, and should not be applied directly to any individual plant.

## COST OF COTTON MANUFACTURING EQUIPMENT AND MILL CONSTRUCTION AS OF JANUARY 1 OF EACH YEAR

(Compiled by Lockwood, Greene & Co.)

DA	ATE	Finisher Picker	Card	Comber	Drawing Frame per Delivery	7" x 3½" Fine Rov- ing Frame per Delivery	Spinning Frame per Spindle	Plain Loom	Mill con- struction per Square Foot
1910		\$750	\$600	\$1,250	\$60	\$6.50	\$2.60	\$83.00	\$0.96
1911		700	550	1,250	60	5.60	2.50	83.00	.94
1912		750	600	1,250	55	5.75	2.50	83.00	.93
1913		700	550	1,200	55	5.50	2.50	83.00	1.03
1014		675	500	1,150	55	5.00	2.00	83.00	10.1
1015		700	525	1,300	60	5.50	2.20	83.00	1.32
1916		750	650	1,300	60	6.75	2.65	83.00	1.67
1917		000, I	850	1,400	75	8.50	3.90	101.00	2.01
1918		1,280	975	1,800	90	10.00	4.50	152.00	2.43
1919		1,000	1,200	2,000	115	13.00	5.50	164.50	2.94
1920		1,760	1,325	2,400	125	14.50	6.00	213.50	3.29
1921		1,020	1,600	2,500	100	18.00	7.00	213.50	3.50

Note.—The above prices for mill construction are for a three-story mill building of slow-burning construction including plumbing but not including fire protection, heating, lighting, or humidification.

## WORLD'S COTTON SPINDLES\*

(As compiled by Leading Authorities)

	(, 13	complica by Bear	iniq ridinoritiss)		
	United States Bureau of The Census	Shepperson's Cotton Facts	Jones' Cotton Handbook	Commercial and Financial Chronicle	International Federation of Master Cotton Spinners
1000	 105,681,000	-	103,115,000	105,667,273	-
1901	 _	107,395,000	102,715,145	108,816,771	_
1902	 _	-	111,802,010	110,745,939	
1903	 -	_	112,854,077	112,072,896	
1904	 _	_	114,394,712	113,757,061	_
1905 .	116,764,438	-	118,254,146	116,168,790	_
1906 .	120,000,595		123,229,202	119,114,207	-
1907	 123,332,971	124,320,000	126,594,000	122,724,859	114,096,168
1908	130,054,408	-	129,346,714	128,172,131	128,923,659
1909 .	133,377,000	_	136,903,457	132,617,404	131,503,062
1910	134,526,000	_	139,608,000	135,637,069	133,384,794
1911 .	137,792,000	_	141,625,000	139,380,477	137,278,752
1912	140,996,000	_	143,142,000	141,210,654	140,693,103
1913	143,398,000	143,730,000	147,191,000	142.573,934	143,452,659
1914	146,397,000	144,980,000	148,891,000	144,038,626	144,704,012
1915	_	148,226,000	150,737,000	144,516,844	-
1916	-	149,785,000	151,667,000	145,033,726	
1917	 148,500,000	151,200,000	154,310,000	146,283,452	-
1918	150,000,000	140,400,000	_	147,068,995	-
1919	 150,000,000	153,505,000	153,799,000	147,512,578	-
1920	 154,600,000	151,313,000	156,163,000	149,627,885	154,201,462

<sup>\*</sup> For those years for which no statistics are given the authorities here quoted either did not compile estimates or their estimates are not available.

# ACTIVE COTTON SPINDLES IN THE UNITED STATES, MONTH BY MONTH

1920-21 August 34,471,515 September . 34,69,806 October 33,669,804 November 31,654,126 December 20,879,402	
August 33,601,305 September 33,488,181 October 32,736,584 November 33,115,360 December 33,657,960 January 33,657,960 January 33,657,960 April 33,282,015 May 35,654,386 April 33,285,673 June 33,654,386 April 33,285,673 June 34,650,358 July 35,531,313	1919 20 August 34,205,180 September 34,219,091 October 34,534,095 November 34,534,100 January 34,655,677 March 34,655,677 March 34,655,677 April 34,555,608 May 34,606,744 June 34,574,464
1916-17  August 32,202,103  September 32,549,189  October 32,555,945  December 32,563,274  January 33,016,803  February 33,206,803  March 33,209,348  April 33,209,348  May 33,475,357  June 33,418,233	August 33,428,439 September 33,535,308 October 33,613,218 December 33,613,218 December 33,644,090 January 33,550,338 February 33,592,222 March 33,734,097 April 33,734,097 April 33,734,097 June 33,675,285 July 33,691,576 July 33,657,892
August 30,347,070 September 30,367,154 October 30,461,320 November 30,45,707 December 30,438,063 January 30,550,330 February 30,550,330 February 30,007,382 April 30,007,382 April 30,007,382 June 31,220,001 July 31,220,001	August 31,054,410 September 31,300,388 October 31,377,569 November 31,488,723 January 31,486,772 January 31,980,240 March 32,028,679 April 32,113,441 May 32,203,374 June 32,209,374 June 32,209,374
September 29,775,030 October 30,030,733 November 30,072,579 December 30,550,843 February 30,550,486 March 30,575,028 April 30,550,177 June 30,501,177 June 30,001,121 July 30,022,054	1913-14   September   30.634.381     October   30.855.300     November   30.940.337     December   31.004.716     January   31.004.716     January   31.005.378     April   31.004.038     March   31.004.038     May   31.005.336     June   30.045.048     July   30.676.835     August   30.347.070

## ACTIVE COTTON SPINDLES IN THE UNITED STATES, BY STATES

	1161	1912	1913	1914	1915	9161	1017	1918	6161	1920
NEW ENGLAND STATES: Maine New Hampshire Vermond Afassachusetts Rhode Island Connecticut	I,040,932 I,411,423 IO5,276 IO,106,348 2,490,175 I,257,827	1,047,466 1,445.161 116,304 10,822,771 2,458,650 1,249,593	1,078,394 1,458,115 129,304 10,904,016 2,464,790 1,276,832	1,112,716 1,454,14 126,304 10,885,303 2,512,702 1,317,203	1,079,503 1,456,749 136,304 10,635,001 2,473,132 1,319,926	1,090,036 1,455,282 135,864 10,806,774 2,552,765 1,343,573	1,097,536 1,445,760 135,864 11,096,275 2,641,617 1,343,916	1,090,684 1,435,528 1,35,864 11,312,816 2,675,172 1,334,656	1,107,052 1,433,955 141,224 11,376,303 2,671,932 1,335,391	1,124,822 1,436,748 14,808 11,500,720 2,658,415 1,301,911
Total New England States	16,510,981	17,139,915	17,311,451	17,408,372	17,100,615	17,474,294	17,700,968	17,984,720	18,065,857	18,287,424
OTHER NON-COTTON-GROW- ING STATES: New York Pemsylvania Maryland Indiana Illinois Others	905,264 471,021 254,120 120,514 72,354 43,404 40,310	833,670 460,617 246,477 128,540 91,066 48,444 10,304	922,341 476,731 242,053 154,215 90,032 50,057 44,760	930,005 101,835 244,020 155,708 865,035 50,508 44,500	888,093 465,003 245,515 142,113 85,816 56,568 24,800	906.911 479.873 249.053 147.053 147.05 86.044 \$6.508 24.046	930.493 489.817 249.270 1149.020 80.756 55.893 18,960	970,509 487,755 245,864 145,864 145,865 81,656 58,355 26,886	976,589 480,367 251,833 140,040 81,256 87,543 30,310	992,678 411,165 242,215 142,795 81,756 57,004 34,843
Total Other Non-Cotton- growing States	1,926,993	1,855,714	680,186,1	7,987,89,1	1,007,508	1,949,554	1,972,109	2,028,882	2,018,838	1,962,546
Corton-Growning States: Virginia North Carolina South Carolina Georgia Alabama Mississippi Mississippi Missouri Missouri Autosana Texas Others	357,816 3,216,105 4,085,749 1,,882,749 897,414 124,272 238,050 90,056 30,744 37,670 37	407.548 3.357.253 4.272.592 1.045.772 900.410 247.474 02.424 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840 31.840	4.26,020 3.565,201 4,409,800 2,071,910 093,580 133,788 133,788 133,788 209,103 31,030 31,030 31,030 31,030 21,030 31,030 31,030 31,030 31,030 31,030 31,030 31,030 31,030 31,030 31,030 31,030	473.386 473.383.710 473.93.70 5.130.340 1.029.100 1.029.100 1.750 31.750 31.750 31.750 112.408	\$03.434 5,823.206 4,683.578 2,148.137 1,028.030 1,028.030 3,165.8 3,161.03 8,238 8,238 8,238 8,238 113.052 113.052	\$66,166 \$,588.098 \$1,735,103 \$2,259,855 \$1,111,060 \$1,111,060 \$1,011 \$1,020 \$1,020 \$1,020 \$1,020 \$1,020 \$1,020 \$1,020 \$1,020 \$1,020	520,894 4,851,101 2,308,114 1,456,786 1,436,786 1,436,786 1,436,786 3,4548 1,4548 1,544 3,4548 1,544 3,4548 1,544 3,454 3,544	\$22,694 +,578,302 +,578,306 2,466,148 1,108,306 1,108,306 363,609 363,609 30,682 30,683 31,528 31,528 31,528 31,528 31,528	559.490 4,770.128 4,010.203 2,499.331 1,774.293 1,774.293 3,535 3,535 3,535 3,535 3,1488 3,1488 3,1488 1,035 1,035 1,035 1,055 1,055	573,610 4,053,880 4,000,460 2,530,531 1,712,516 1,712,516 383,208 383,208 317,08 102,128 143,054 68,025
Total Cotton-growing States	11,084,623	11,582,869	12,227,226	12,711,303		13,382,065	14,155,758	14,529,063	14,846,230	15,230,983
Total United States	29,522,597	30,578,528	31,519,760	31,519,766   32,107,572		31,064,235   32,805,883	33,555,535	34,542,005	34,542,005 34,030,934	33,400,433

## COTTON MILLS IN SOUTHERN STATES

The statistics given below were compiled by HENRY G. HESTER, Secretary of the New Orleans Cotton Exchange, who takes a census each year of the Southern cotton manufacturing industry. Unfortunately no such census is taken of the Northern cotton manufacturing industry and so there are no complete, authoritative statistics for the entire country.

								-		
	1011	1912	1013	1914	1915	1916	1917	1918	1919	1920
Virginia	13	1 2	12	1 2	13	14	13	13	1.4	14
North Carolina	330	335	339	341	342	352	366	374	391	414
South Carolina	188	190	190	189	190	189	194	196	196	201
Georgia	157	157	157	156	157	157	157	157	160	160
Alabama	69	68	69	70	73	74	73	74	74	79
Mississippi	22	2 I	20	19	20	17	18	17	17	17
Tennessee	25	24	22	23	23	25	25	25	25	25
Kentucky	8	7	7	6	7	6	7	7	7	7
Missouri	3	3	2	2	3	3	3	3	2	2
Arkansas	2	2	2	2	2	2	2	2	2	2
Louisiana	5	5	5	5	5	5	5	5	5	5
Texas	17	17	15	15	15	15	15	15	16	18
Oklahoma	I	1	I	1	I	1	I	I	1	1
Total	840	842	841	841	851	860	879	889	910	945

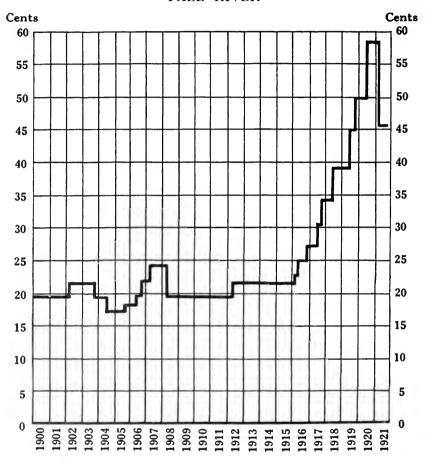
## LOOMS IN SOUTHERN COTTON MILLS

The statistics given below were compiled by Henry G. Hester, Secretary of the New Orleans Cotton Exchange, who takes a census each year of the number of looms in Southern mills. Unfortunately no such census is taken for Northern mills, so there are no complete, authoritative statistics for the entire country. The Southern statistics include all kinds of cotton looms, including those running on narrow fabrics.

	1911	1912	1913	1014	1915	1916	1917	1918	1919	1920
Virginia	11,455	11,729	11,723	12,744	14,154	14,772	15,287	15,088	15,828	16,368
North Carolina .	58,602	62,475	64,552	65,901	67,674	66,359	69,366	70,072	69,611	71,114
South Carolina	105,571	109,343	113,858	110,798	113,217	115,105	115,503	115,636	115,491	115,432
Georgia	40,467	41,456	42,879	43,649	43,487	44,778	45,126	46,751	46,696	46,939
Alabama	18,158	18,547	19,240	19,004	19,540	19,828	21,189	20,171	21,288	21,282
Mississippi	4,847	4,777	4,778	4,752	4,848	4,396	4,376	4,144	4,118	4,312
Tennessee	4,311	4,513	5,191	5,126	5,138	5,426	5,336	5,308	5,357	5,383
Kentucky	1,437	1,437	1,475	1,350	1,350	1,350	1,356	1,353	1,353	1,353
Missouri	958	968	730	730	730	730	730	730	730	730
Arkansas	164	164	160	100	276	280	276	276	233	161
Louisiana	1,916	2,312	2,312	2,316	1,362	1,812	2,018	2,068	2,100	2,018
Texas	2,777	3,141	3,125	3,242	3,284	3,377	3,405	3,612	3,766	3,928
Oklahoma	-	-	-		-	-	-	64	64	64

Total . . . . 250,663 260,862 270,023 269,772 275,060 278,213 283,968 285,273 286,635 289,084

## WAGE RATES PAID FOR WEAVING PRINT CLOTHS IN FALL RIVER



The above chart, based on the statistics given on the next page, shows the fluctuations in the amount paid by Fall River print cloth manufacturers to their weavers for weaving 47½ yards of 28″, 64 x 64, 7-yard print cloths. Wage rates of other classes of operatives, per hour or per piece, fluctuated in about the same ratio as those of weavers during the period covered. Accordingly this chart may be taken as indicating the general changes in the hourly or piece wage rates of Fall River mill-workers.

## WAGE RATES PAID FOR WEAVING PRINT CLOTHS IN FALL RIVER

(Compiled by the Industrial Service Department of The Merchants National Bank of Boston)

The figures below are the prices paid for weaving  $47\frac{1}{2}$  yards of 28'',  $64 \times 64$ , 7-yard print cloths.

	W. D.	Advance or Reductions from	Percentage of
Period	Wage Rate	Previous Rate	1900 Rate
December, 1899 to March, 1902	\$0.1980	+100	100
March, 1902 to November, 1903	.2178	+10',	110
November, 1903 to July, 1904	.1980	$-0_{10}^{1}$	100
July, 1904 to October, 1905	.1732	$-12\frac{1}{2}\frac{1}{6}$	$87\frac{1}{2}$
October, 1905 to July, 1906	.1861	$+7\frac{1}{2}$	94
July, 1906 to November, 1906	.1980	$+6_{10}^{4}e^{-c}$	100
November, 1906 to May, 1907	.2178	+10'6	IIO
May, 1907 to May, 1908	.2306	+10'6	I 2 I
May, 1908 to March, 1912	.1966	-1710 C	99
March, 1912 to January, 1916	.2103	+10';	100
January, 1916 to May, 1916	.2271	+5';	115
May, 1916 to December, 1916	.2498	+10'(	126
December, 1916 to June, 1917	.2748	+10'(	130
June, 1917 to December, 1917	.3023	+10'	154
December, 1917 to June, 1918	.3401	$+12\frac{1}{2}$	172
June, 1918 to June, 1919	.3911	+15'	198
June, 1919 to December, 1919	.4498	+15'6	227
December, 1919 to June, 1920	.5000	$+12\frac{1}{2}$	256
June, 1920 to June, 1921	.5819	+15%	293
January, 1921 to —	.4510	-22 <sup>1</sup> / <sub>2</sub>	228

## WAGE CHANGES IN THE COTTON MANUFACTURING INDUSTRY OF THE UNITED STATES FROM 1907 TO 1920

The following table compiled by the United States Department of Labor, through its Bureau of Labor Statistics, shows the average earnings in cents per hour of a few of the most important cotton mill occupations from 1907 to the summer of 1920, as drawn from the pay rolls of representative establishments in the principal cotton manufacturing States both North and South. Data were not collected in 1915, 1917, and 1919.

YEAR		ng-frame nders		eeder nders		iners, ime	Loom Fixers	We	eavers	Trimmers or Inspectors
	Male	Female	Male	Female	Male	Female	Male	Male	Female	Female
1907	10.0	9.3	11.6	13.9	12.4	11.0	20.7	16.1	15.1	10.2
1908	9.8	9.3	12.3	13.8	11.9	10.7	20.2	16.0	15.2	10.1
1909	9.9	9.1	12.9	13.5	11.7	10.6	19.7	15.1	14.4	9.9
1910	9.6	9.0	13.1	13.3	12.0	10.8	20.0	15.1	14.7	9.9
1911	9.7	9.5	13.5	13.6	12.6	11.1	20.3	15.6	14.8	10.3
1912	10.8	0.11	14.3	14.8	14.8	12.4	22.4	16.9	16.3	II.2
1913	10.9	11.5	14.5	15.3	14.3	12.8	22.7	17.0	16.4	11.2
1914	11.6	11.8	15.3	15.5	15.0	13.2	23.3	17.6	16.7	11.3
1916	12.6	13.6	17.4	18.8	16.9	14.9	27.0	20.5	20.1	12.9
1918	19.9	20.9	26.5	27.7	24.8	23.3	30.1	30.1	28.5	18.6
1920	42.7	37.1	53.3	48.6	47.5	42.7	68.5	57.3	52.8	33.5

In the industry as a whole hourly earnings in 1920 were:—

3.6 times as high as in 1907

3.2 times as high as in 1913

1.8 times as high as in 1018

The above data for 1920 show the highest wage level reached in the cotton manufacturing industry during or after the war. It was from this high level that a reduction, amounting to 2232 per cent. in most mills, was made at the end of 1920 or early in 1921.

Accompanying the increase in hourly earnings there has been a reduction through the period in the regular hours of labor. To illustrate, the average full time of male frame spinners per week was:—

59.4 hours in 1907 56.9 hours in 1913 50.7 hours in 1920

61.0 hours in 1907

For female frame spinners the average full time per week was:-

57.8 hours in 1913

51.8 hours in 1920

## GENERAL WAGE CHANGES IN NEW BEDFORD SINCE 1870

(Compiled by the Industrial Service Department of The Merchants National Bank of Boston

Period	Advance or Reduction from Previous Rate	Percentage of January 1870 Rate
January, 1870 to March, 1870	_	100.00
March, 1870 to December, 1873	+100	110.00
December, 1873 to December, 1875	-10/6	99.00
December, 1875 to August, 1878	-1000	89.10
August, 1878 to January, 1880	-1000	80.10
January, 1880 to April, 1880	+1000	88.20
April, 1880 to April, 1884	+1000	97.02
April, 1884 to April, 1885	-1000	87.31
April, 1885 to April, 1886	-1000	78.57
April, 1886 to April, 1888	+1000	86.42
April, 1888 to August, 1892	+500	90.74
August, 1892 to December, 1802	+366	93.46
December, 1892 to September, 1893	$+7^{\epsilon}c$	100.00
September, 1893 to August, 1894	-10°6@15°6	87.50
August, 1894 to April, 1895	$-5^{\circ}$	83.12
April, 1895 to January, 1898	+500	87.27
January, 1898 to April, 1800	-1000	78.54
April, 1899 to December, 1899	+10'0	86.39
December, 1899 to April, 1902	$+10^{\circ}$	95.02
April, 1902 to December, 1903	+1000	104.52
December, 1903 to July, 1906	—10°°*	95.02
July, 1906 to December, 1906	$+5^{\circ}_{0}$	99.77
December, 1906 to May, 1907	$+7\frac{1}{2}(\vec{e})$	107.25
May, 1907 to April, 1908	+1000	117.97
April, 1908 to March, 1912	$-10^{\circ}$	106.17
March, 1912 to January, 1916	$+ 10^{\epsilon}_{0}$	116.78
January, 1916 to April, 1916	$+5^{\epsilon_{\epsilon_0}}$	122.61
April, 1916 to November, 1916	$+10^{\circ}e$	134.87
November, 1916 to June, 1917	+1000	148.35
June, 1917 to November, 1917	+1000	163.18
November, 1917 to June, 1918	+1000	179.49
June, 1918 to June, 1919	$+17\frac{1}{2}^{\circ}$	210.90
June, 1919 to December, 1919	$+15^{\circ}$	242.53
December, 1919 to June, 1920	$+12\frac{1}{2}\frac{C}{0}$	272.84
June, 1920 to January, 1921	$+15$ $^{\circ}e$	313.76
January, 1921 to —	$-22\frac{1}{2}\stackrel{\leftarrow}{,0}$	243.16

<sup>\*</sup>Approximate reduction of  $10\frac{cr}{c}$  to scale of December, 1899.

## WAGE RATES PAID BY COTTON MILLS OF LANCASHIRE, ENGLAND, SINCE 1853

The table below gives the wage rates paid under the standard lists of Lancashire, in terms of percentage of the basic list prices. Basic list prices are indicated by 100; rates 5 per cent. above list are expressed by 105; rates 5 per cent. below list are expressed by 95, etc.

(Compiled by The Industrial Service Department of The Merchants National Bank of Boston)

	End of	Year	Cotton S	PINNING	Cotton Weaving Blackburn
	_		Bolton List	Oldham List	and Uniform Lists
1853			No List	No List	Blackburn List Adopted + 10
1854-1857			No List	No List	100
0 0			List Adopted	No List	100
			100	No List	100
0.0			105	No List	105
1861-1865			100	No List	100
1866			105	No List	100
1867			100	No List	List Revised
1868			100	No List	100
1860			95	No List	95
0			95	No List	100
1871			100	No List	100
1872-1873			105	No List	100
1874			100	No List	100
0			105	No List	100
0.0			105	List Adopted	100
			100	95	100
			100	85	90
0			90	80	85
0.00			95	85	85
1881–1882			95	00	00
			95 95	90	85
2.0			95 95	90	00
1885-1887 .			, 80 32	85	90
1888–1880 .			95	90	00
			100	90	00
_ ′			100	95	00
			100	95 95	Uniform List
.092			100	93	Adopted — 10
893-1898.			100	92.00	00
1899			100	95	92.5
. 4.001-000			105	100	92.5
905			105	100	97.5
906			105	105	100
1907-1908.			110	011	100
1101-0001			105	105	100
Q12			105	105	105
913			105	105	105
			105	105	105
			110	110	105
Q16			115	115	110
017			140	140	1.10
			215	215	215
010			245	245	245
			315*		

<sup>\*</sup>Strippers and grinders, blowing-room operatives, and leading men or women in cotton-rooms received in 1920 an additional 10 per cent. on wages realized after the addition of the 70 per cent. of the list.

<sup>†</sup> Tapers, dry tapers, warp dressers, and loom overlookers received an advance in 1920 of only 55 per cent, of list, instead of the 70 per cent, which other operatives received.

## MONTHLY HIGH AND LOW PRICES OF MIDDLING UPLAND SPOT COTTON AT NEW YORK

(From statistics compiled by the New York Cotton Exchange)

	190	10-0061	1001-03	0.2	1902-03	-0.3	to 8001	†*o	I yo	50-toh1	1005-06	90-	1900	70-001
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
September	1.	0.5	10.3°	80 138	0.5	×.	13.00	11.23	11.50	10.00	2	2001	0	3
October		016	\$\frac{\display}{2} = \frac{\display}{2}	715	8.94	8.03	10.00	0.50	10.00	0.00	10.75	6.83	11.10	0.00
November	01	- 0 - 1 	× :	713	8.05	8.30	11.05	10.50	10.25	0.30	12,00	10.00	11.40	10.10
Lagrana	1016	; <del>+</del>	e in a	X.	00:00	8.50	14.10	11.05	00.00	6.85	12.00	11.05	11.25	10.45
Folymore:	2.	5	-E	~~. %	9.03	8.82 5.83	10.75	13.10	7.35	7.00	12.25	11.35	11.00	10.70
Monthly	O	; ; ; ; ; ;	× 2.0	- T	10.25	0.00	17.25	13.50	8.15	7.35	11.45	10.80	11.25	11.00
Angl	913 9 4	Σ s	0 1 6	S.	10.45	00.0	16.65	14.00	8.30	7.75	11.80	10.03	11.45	10.00
Max	( <u>1</u> )	51 c	-x -	ິ	10.75	00.0	15.45	13.75	8.15	7.55	11.90	11.55	11.45	10.00
Inne	, e 10 0 0	, s , s	; <del>-</del> '	;; ·	12.15	10.75	00.81	12.75	S.S.	7.85	12,00	11.45	12.00	11.50
Junk	C 0	, F S		, † 6 6	13.35	11.50	12.85	10.85	10.15	8.40	11.30	10.80	13.25	12.80
Angret	3 is	, i .	· 6	0 0X	13.50	11.00	11.25	10,00	04.11	10.00	11.00	10.80	13.50	12.85
	s o	0	5	os.	12.75	12.75	11.65	10.43	11.35	10.50	10.00	08.6	13.55	13.00
Season	1.2	∞	9.5	713	13.50	8.30	17.25	0.50	11.50	6.85	12.60	0.80	13.55	0.00

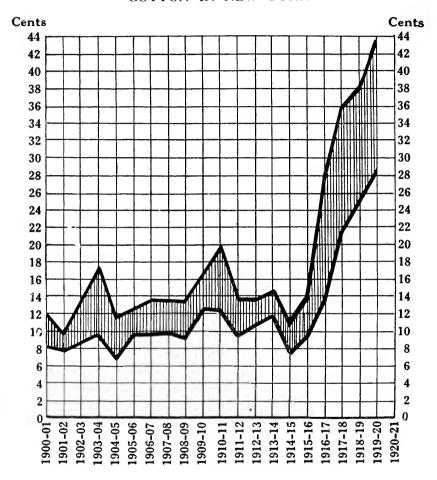
MONTHLY HIGH AND LOW PRICES OF MIDDLING UPLAND SPOT COTTON AT NEW YORK (continued)

	190	80-2061	8061	1908-09	1900	01-6061	161	11-0161	1911	1911–12	1912-13	-13	161	1913-14
	High	Low	High	Low	High	Low								
September	13.55	11.75	09.6	9.30	13.75	12.40	15.50	13.60	12.00	10.35	06.11	11.50	14.30	12.75
October	12.00	10.80	9.45	00.6	15.05	13.30	14.90	13.75	10.20	9.35	11.70	10.75	14.50	13.50
November	11.80	10.60	9.55	9.25	15.20	14.20	15.15	14.50	09.6	0.30	13.10	11.75	14.10	13.30
December	12.20	11.70	9.35	01.6	16.15	14.65	15.25	14.80	9.62	0.30	13.20	12.75	13.50	12.50
January	12.25	11.30	10.00	9.25	01.01	13.85	15.00	14.75	0.70	9.35	13.40	12.85	13.05	12.30
February	11.85	11.35	10.00	9.62	15.25	01.41	14.95	14.00	10.70	06.6	13.05	12.50	13.05	12.55
March	11.65	10.40	9.85	09.6	15.35	14.65	14.65	14.20	10.90	10.35	12.90	12.40	13.75	13.00
April	10.50	06.6	10.90	9.95	15.30	14.55	15.45	14.40	12.00	10.85	12.60	11.70	13.50	13.00
May	11.50	10.20	11.80	10.85	16.05	14.50	16.15	15.35	06.11	11.30	12.10	11.80	14.50	12.90
June	12.20	11.30	12.00	11.20	15.40	14.50	15.95	14.75	06.11	11.40	12.50	07.11	13.75	13.25
July	11.50	10.70	13.15	12.10	16.45	15.25	14.85	12.50	13.40	11.65	12.45	11.95	13.25	12.50
August	9.85	0.50	13.10	12.40	19.75	15.20	13.15	09.11	13.10	11.25	12.70	06.11	00.11	11.00
Season	13.55	9.50	13.15	00.6	19.75	12.40	16.15	09.11	13.40	9.20	13.40	10.75	14.50	00.11

MONTHLY HIGH AND LOW PRICES OF MIDDLING UPLAND SPOT COTTON AT NEW YORK (continued)

	1914-15	1.5	1915-16	91	161	21-9161	161	81-2161	161	61-8161	191	1919-20
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
August	11.00	00.11	9.85	9.20	16.40	13.35	28.00	23.10	37.30	20.70	, , , , , , , , , , , , , , , , , , ,	12 C
October	1	I	12.40	9.75	16.30	15.15	26.30	21,20	38.20	32.65	22.85	0000 0000 0000
Normalian	ı	1	12.75	11.85	19.30	16.60	29.00	25.25	34.45	30.20	20.00	21 10
Document	7.75	7.50	12.50	09.11	20.05	18.75	31.25	28.75	31.60	27.75	10.20	28.10
Localidation	7.80	7.25	12.75	11.95	20.30	16.20	31.85	29.85	33.00	27.50	10.25	2 0 0
Fobrance	8.70	7.90	12.60	11.80	18.80	16.75	33.30	31.50	32.40	25.00	30.75	2000
March	8.70	8.35	12.15	11.20	17.05	14.30	32.05	31.20	27.85	25.00	.10.To	21.0
And	08.6	8.25	12.15	11.45	19.30	17.00	35.05	32.70	28.70	26.10	12.05	10.75
Marie	10.60	9.80	12.20	11.95	21.15	19.35	36.00	26.75	20.65	28.30	12.25	11 25
Inno	10.40	0.50	13.35	12.30	22.10	19.60	30.10	25.70	34.00	28.75	13.00	10.00
Inly	9.85	9.45	13.45	12.65	27.40	22.65	32.30	29.00	34.05	30.35	10.00	1, 1,
· · · · · · · · · · · · · · · · · · ·	09.6	8.90	13.30	12.90	27.65	24.60	34.10	28.55	36.60	33.40	43.75	39.25
Season	11.00	7.25	13.45	0.20	27.65	13.35	36.00	21.20	38.20	25.00	43.75	28.85

## HIGH AND LOW PRICES OF MIDDLING UPLAND SPOT COTTON IN NEW YORK



The above chart is based on the statistics given on the next page. It shows the high and low prices of middling upland spot cotton, in cents per pound, in the New York market, as reported by the New York Cotton Exchange. The years as given are the official cotton seasons. Through 1013–14 the seasons were from September 1 to August 31. Starting with 1014–15, they have been from August 1 to July 31.

### HIGH AND LOW PRICES OF MIDDLING UPLAND SPOT COTTON IN NEW YORK

### In Cents Per Pound

(From statistics compiled by the New York Cotton Exchange)

The years as given are the official cotton seasons. Through 1913-14 the seasons were from September 1 to August 31. Starting with 1914-15, they have been from August 1 to July 31.

	_														
Season														High	Low
1000-01														I 2	8 1 5
1001-02														05	$\frac{7}{1} \frac{1}{6} \frac{3}{6}$
1002-03														13.50	8.30
1903-04														17.25	0.50
1904-05														11.65	6.85
1905-06														12.00	9.85
1900-07														13.50	9.60
1907-08														13.55	0.00
1908-09														13.15	0.00
1000-10														16.45	12.40
1010-11														19.75	12.30
1011-12														13.40	0.20
1012-13														13.40	10.75
1013-14														14.50	11.00
1014-15														10.60	7.25
1015-10														13.45	0.20
1010-17														27.65	13.35
1917-18														30.00	21.20
1918-19														38.20	25.00
1010-20														43.75	28.85

## AVERAGE CASH DIVIDENDS OF NEW BEDFORD AND FALL RIVER COTTON MILLS

(Based on data compiled by Sanford & Kelley of New Bedford and G. M. Haffards & Co. of Fall River)

												New Bedford	Fall River
1910												8.54' ;	6.80
1011												5.780	4.96° c
1912												4.616	4.25° c
1913												5.80%	7.000
1014												4.92	4.13
1915												6.70° c	3.920
1916											٠	7.53° c	$7.96^{\epsilon}$
1917												11.82	12.82' 6
1918												12.96€	18.34
1919												13.626	14.48° c
1920										٠		19.52	31.330

## PRICES OF EGYPTIAN, SEA ISLAND, AND LONG STAPLE PEELER COTTONS IN COMPARISON WITH NEW YORK MIDDLING UPLAND SPOTS

Week by Week during 1919 and 1920

D.v.	ГЕ	Sake Spo (Compile	ally Good F llaridis Egy ots at Liver ed by The M al Bank of	ptian pool Lerchants	Extra Choice Sea Islands at Savannah	Strict Middling 1½" Peelers at New Bedford (Compiled by	Middling Upland Spots at New York (Compiled by
		In English Pence	Rate of Exchange	Equiva- lent in American Cents	(Compiled by Gordon & Co.)	the New Bedford Standard)	New York Cotton Exchange)
1919	6				# O	201 6	27.70
January	6	27.30	4.75	54.03	52	$38\frac{1}{2}$ @ 41 $38$ @ 40\frac{1}{2}	31.30
	10	27.30	4.75	54.03	52	38 @ 40 <sub>2</sub> 38 @ 40	30.90 29.10
	17 24	27.30	4·75 4·75	54.03 54.03	5 <sup>2</sup> 5 <sup>2</sup>	35 @ 38	25.60
	31	27.30	4.75	54.03	50	$35 @ 38$ $35\frac{1}{2} @ 38$	26.95
February	7	27.30	4.75	54.03	50	36 @ 39	25.00
rebraary	14	27.00	4.75	53.61	50	$35 @ 37\frac{1}{4}$	25.80
	21	27.00	4.75	53.61	50	36 @ 36½	26.65
	28	27.00	4.75	53.61	50	$36 @ 37\frac{1}{2}$	26.00
March	7	27.00	4.75	53.61	46	$35\frac{1}{2}$ @ 37	26.45
	14	27.00	4.75	53.61	46	$35\frac{1}{2} @ 38$	28.15
	21	27.00	4.70	53.05	47	$35\frac{1}{2} @ 37\frac{1}{2}$	28.40
	28	27.00	4.58	51.60	50	$36 @ 37\frac{1}{2}$	28.25
April	4	26.59	4.66	51.63	50	37 @ 38	28.70
•	11	26.59	4.64	51.41	50	36 (a 38½	28.45
	16	26.59	4.65	51 52	50	$38\frac{1}{2} @ 39\frac{1}{2}$	28.30
	25	26.59	4.66	51.63	50	38 @ 40	29.25
May	2	26.59	4.67	51.74	50	38½ @ 41	29.15
	9	26.59	4.67	51.74	50	39 @ 41	29.10
	16	26.59	4.65	51.52	50	40 @ 421	30.05
	23	26.59	4.64	51.41	50	$42\frac{1}{2} @ 43\frac{3}{4}$	31.55
	30	26.59	4.63	51.29	52	44 @ 47	33.15
June	5 · ·	27.09	4.61	52.03	52	44 @ 46	31.40
	ΙΙ	27.09	4.61	52.03	52	$45\frac{1}{2}$ @ 47	32.65
	20	27.09	4.60	51.02	56 @ 58	$45\frac{1}{2}$ @ $48$	33.15
	27	27.09	4.59	51.81	58	46 <b>@</b> 48	34.75
July	4 · ·	27.09	4.52	51.02	58	$47\frac{1}{2}$ @ 48	33.45
	11	27.09	4.48	50.57	58	49 @ 50	35.85
	18	27.09	4.43	50.50	58	52 @ 54	36.30
	25	27.09	4.37	49.33	58	53 @ 55	35.50
	31	27.09	4.35	49.10	58	$52\frac{1}{2}$ @ 56	34.20
August	8	31.00	4.32	55.80	63	50 @ 52	32.15
	15	30.00	4.27	53.37	63 @ 65	50 @ 53	31.50
	22	29.50	4.18	51.38	67 @ 70	51 @ 53	31.50
	29	30.00	4.20	52.50	67 @ 70	51 @ 54	32.05
Septembe		30.00	4.14	51.75	67 @ 70	52 (0. 55	29.40
	I 2	30.00	4.17	52.12	67 @ 70	46½ @ 50	29.15
	19	30.00	4.15	51.87	67 @ 70	48 @ 50	30.25
	26	30.00	4.24	53.00	65	53 @ 54	32.85

## PRICES OF EGYPTIAN, SEA ISLAND, AND LONG STAPLE PEELER COTTONS IN COMPARISON WITH NEW YORK MIDDLING UPLAND SPOTS (continued)

Da	те	Sake Spe (Compile	ally Good F llaridis Egy ots at Liver ed by The M al Bank of	ptian pool Jerchants	Extra Choice Sea Islands at Savannah	Strict Middling r¼" Peelers at New Bedford (Compiled by	Spots at New York (Compiled by
		In English Pence	Rate of Exchange	Equiva- lent in American Cents	(Compiled by Gordon & Co.)	the New Bedfor Standard)	d New York Cotton Exchange)
1919							-
October	3	30.00	4.20	52.50	65	52 @ 54	31.20
	10	30.00	4.10	52.37	65	56 @ 57	33.60
	17	32.00	4.15	55-33	65	59 @, 63	34.75
	24	33.50	4.15	57.93	65 @ 67	65 @ 70	37.20
	31	35.50	4.16	01.53	73	72 @ 75	38.40
November	7	37.50	4.14	64.69	75	78 @ 84	39.75
	14	40.00	4.11	68.50	75 @ 8o	80 @ 90	39.65
	2I	40.50	4.04	68.17	78 @ 8o	85 @ 87	38.40
	28	45.00	4.00	75.00	78 @ 8o	75 @ 8o	39-45
December	5	49.00	3.84	78.40	78 @ So	76 @ So	39.25
	I2	50.50	3.65	76.80	78 @ 80	78 @ 81	38.00
	19	49.00	3.75	76.56	78 @ 8o	80 @ 82	39.25
	23	51.00	3.83	81.39	78 @ 8o	82 @ 83	39.25
1920							
January	2	55.00	3.78	86.62	78 @ 80	83 @ 85	39.25
	9	58.00	3.73	90.14	78 @ 80	84 @ 90	39.25
	16	67.50	3.68	103.50	78 @ 8o	85 @ 88	39.25
	23	68.00	3.63	102.85	78 @ So	90@95	39.30
	30	77.00	3.50	112.29	84	87 @ 94	39.50
February	6	82.50	3.33	114.47	87	90@95	₹ 37.8o
	13	91.00	3-43	130.05	0.2	85@91	38.45
	20	96.00	3.45	138.00	95	90@95	₹ 39.00
	27	92.50	3.39	130.65	95 @ 1.00	90@95	ੂ 39.65
March	5 · ·	85.50	3.65	130.03	1.00 @ 1.01	94@98	39.50 37.80 37.80 39.45 39.65 40.90 41.90 41.50
	I2	87.50	3.68	134.16	1.00 @ 1.01	94 @ 98	É 41.∞
	19	84.00	3.80	133.00	1.00 @ 1.01	95 @ 1.02	2 41.00
	26	83.00	3.95	136.60	1.00 @ 1.01	95 @ 1.02	ਜੁੱ 41.50
	31	83.00	3.90	134.88	1.00 @ 1.01	94 @ 1.02	41.75
April	9	86.00	3.97	142.26	1.00 @ 1.01	98 @ 1.06	43.00
	16	86.50	3.95	142.36	1.05 @ 1.10	1.00 @ 1.03	43.25
	23	85.50	3.88	138.22	1.15	1.00 @ 1.05	41.65
	30	84.50	3.82	134.49	1.15	1.00 @ 1.09	41.25
May	7 · ·	87.00	3.83	138.84	1.15	1.00 @ 1.09	41.10
	14	83.50	3.81	132.55	1.15	1.00 @ 1.09	41.15
	20	76.50	3.81	121.44	1.15	1.00 @ 1.10	43.00
	26	75.50	3.87	121.74	1.15	1.00 @ 1.10	40.00
June	4	74.00	3.90	120.25	1.15	1.00 @ 1.10	40.00
	II	72.00	3.94	117.78	1.15	1.00 @ 1.10	10.00
	18	68.00	3.96	112.20	-	1.00 @ 1.10	39.25
	25	63.00	3.96	103.95		1.00 (0, 1.05)	38.25

## PRICES OF EGYPTIAN, SEA ISLAND, AND LONG STAPLE PEELER COTTONS IN COMPARISON WITH NEW YORK MIDDLING UPLAND SPOTS (continued)

Dat	ſE	Sake Spo (Compile	llly Good F llaridis Egy ets at Liver d by The M al Bank of	ptian pool Jerchants	Extra Choice Sea Islands at Savannah	Strict Middling 14" Peelers at New Bedford (Compiled by	Middling Upland Spots at New York (Compiled by
		In English Pence	Rate of Exchange	Equiva- lent in American Cents	(Compiled by Gordon & Co.)	the New Bedford Standard)	New York Cotton Exchange)
1920							-
July	2 .	62.00	3.95	102.04	7	1.00 @ 1.05	39.75
	9 . =	62.00	3.94	101.78	Prices	.98 @ 1.05	40.50
	10	64.00	3.88	103.46	is o	.95 @ 1.00	42.50
	23 .	66.00	3.75	103.12	of s	.92	43.75
	30	67.00	3.71	103.57	Sea	.92	40.00
August	6.	68.00	3.69	104.58		.90	39.50
	13	70.00	3.65	100.47	Island nominal after June, due	.85 @ .90	37.50
	20	68.00	3.59	101.73	ā.	.75 @ .80	33.50
	27	07.00	3.56	99.36	nor	.80 @ .85	33.50
September	3	66.50	3.55	98.35	Ξ.	.65 @ .75	31.75
	10	65.00	3.51	95.03	<u>a</u>	.65 @ .72	32.25
	17	61.00	3.54	89.97	afi	.65@ .70	31.00
	24	57.00	3-47	82.42	ter	.52 @ .56	28.50
October	I	54.00	3.50	78.73	Ju	.46 @ .50	25.00
	8	51.00	3.50	74-35	ne.	.43 @ .47	24.50
	15	45.00	3.46	64.89	2	.37 @ .40	22.00
	22	43.00	3.44	10.10		.32 @ .35	21.00
	20	43.00	3.45	01.83	to	.34 @ .36	22.20
November	5 · ·	43.00	3.38	00.54	Ħ.	.34 @ .36	20.85
	12	40.00	3.30	56.00	act	.34 @ .36	19.40
	10	33.00	3.43	47.15	Ξ.	.27 @ .28	17.55
	26	30.00	3.48	43.50	Ę.	.24 @ .26	15.85
December	3 · ·	28.00	3.46	40.37	to inactivity of market	.24 @ .25	16.15
	10	28.00	3.45	40.23	ma	.24 @ .25	16.25
	17	26.00	3.51	38.01	rko	.24 @ .26	1().00
	22	25.00	3.53	30.77	*	.24 @ .26	14.50
	31	22.00	3.52	32.25		.25 @ .26	14.75

## YEARLY AVERAGE PRICES OF COTTON AND COTTON SEED PAID TO PRODUCERS IN THE UNITED STATES

(From statistics compiled by the United States Bureau of the Census)

Crop Year	Yearly Average Price of Lint Cotton Per Pound Vearly Average Price (In Cents) of Cotton Seed Per Ton
1010	13.95 \$25.80
1911	9.56 17.10
1912	11.48 19.20
1913	12.48 22.40
1914	7.33
1915	. 11.22 33.60
1916	17.28 50.50
1917	. 27.12 66.08
1918	. 28.76 65.32
1919	. 35.36 67.18

### FARM PRICES OF COTTON SEED, ON 15TH OF EACH MONTH,

Per Ton
(From statistics compiled by United States Department of Agriculture)

		1011	1912	1913	1011	1015	1910	1017	1918	1919	1920
T		6.6	0 (		0 .	i co	0 60.	0	07		· 20
January	15	\$26.35	\$16.57	\$21.98	\$22.70	\$19.14	\$36.85	\$52.53	\$67.51	\$64.03	\$19.88
February	15	25.61	16.81	22.01	23.37	23.33	36.75	51.43	66.95	64.65	69.34
March	15	25.49	18.21	21.55	23.00	22.32	36.56	53.18	68.27	64.00	67.18
April	15	26.12	18,62	21.80	24.17	22.69	38.13	55-94	68.08	64.28	68.71
May	15	25.46	19.21	21.88	23.50	22.07	37.01	55.61	68.16	63.83	19.88
June	15	23.38	19.24	21.54	23.62	20.82	35.79	57.10	66.03	63.80	66.16
July	15	22.70	19.04	21.37	22.78	20.05	36,06	50.00	64.11	04.24	61.64
August	15	20.45	18,02	20.24	20.16	20.14	35.22	50.61	61.34	66.23	43.22
September	15	18.09	17.61	21.07	13.88	20.98	41.13	57.58	67.90	62.13	29.00
October	15	16.73	18.04	22.01	15.28	33.73	47.10	65.02	65.85	66.95	28.04
November	15	16.69	18.57	22.46	14.01	34.01	55.82	69.38	64.97	72.65	26.00
December	15	16.70	21.42	23.48	17.73	35.54	56.35	68.29	65.05	69.07	_

## HIGHEST AND LOWEST PRICES PAID FOR THE PRINCIPAL

DURING MONTH OF	Jan Deli	UARY		ARCH IVERY		AY	Ju Der	LY IVERY
	High	Low	High	Low	High	Low	High	Low
								-
Season of 1914-15								
August, 1914	_	-	_	_	_	-	_	-
September	_	_	_	_	_	_	_	_
November (old contract)	7.56	6.97	7.5 I	7.00	7.40	7.25	***	_
November (new contract)	7.85	7.15	7.95	7.36	8.15	7.57	8.20	7.72
December (old contract)	7.42	6.75	7.28	7.27	_	-	_	-
December (new contract)	7.70	6.86	7.89	7.08	8.07	7.25	8.26	7.41
January, 1915 (old contract)	8.20	7-47	8.20	7.77	8.56	7.90	0	-
January (new contract)	8.56	7.75	8.88 8.18	7.85 8.18	9.10 8.63	8.00	9.28	8.20
February (old contract) February (new contract)	9.61	0.10	8.73	8.02	8.98	8.63 8.26	0.17	8.47
March	10.71	8.40	9.35	8.15	9.88	8.32	10.10	8.55
April	11.00	10.42	11.23	10.66	10.38	9.46	10.63	9.77
May	10.76	9.70	10.95	10.01	9.98	9.00	10.29	9.17
June	10.30	9.87	10.53	10.16	10.73	10.34	9.62	9.15
July	10.15	9.08	10.38	9.39	10.52	9.58	9.39	8.41
Season (old contract)	8.20	6.75	8.20	7.00	8.63	7.25	_	_
Season (new contract)	11.09	6.86	11.23	7.08	10.73	7.25	10.63	7.41
Season of 1915–16								
August, 1915	10.45	9.50	10.70	9.75	10.02	9.97	11.15	10.22
September	12.75	10.13	13.04	10.39	13.16	10.62	13.17	10.81
October	13.20	11.85	13.47	12.06	13.68	12.20	13.67	12.25
November	12.50	11.40	12.79	11.61	13.00	11.75	13.06	11.83
December	12.72	11.70	13.00	11.98	13.21	12.21	13.30	12.33
January, 1916	12.47	11.99	12.65	11.71	12.88	11.93	13.02	12.05
February	12.62	11.85	12.09	11.06	12.28	11.24	12.41 12.30	11.44
April	12.57	12.17	12.74	12.28	11.00	11.76	12.14	11.01
May	13.56	12.48	13.72	12.63	13.15	11.98	13.27	12.12
June	13.68	12.83	13.81	12.99	13.97	13.14	13.38	12.50
July	13.62	13.08	13.75	13.23	13.88	13.36	13.17	12.70
Season	13.68	9.50	13.81	9.75	13.97	9.97	13.67	10.22
Season of 1916–17								
August, 1916	16.42	13.34	16.58	13.47	16.70	13.65	16.75	13.98
September	16.48	15.08	16.60	15.24	16.74	15.43	16.77	15.50
October	19.80	16.42	19.91	16.51	20.04	16.84	20.04	16.93
November	21.19	18.65	21.32	18.80	21.55	18.92	21.51	18.96
December	20.56	15.90	20.80	16.20	20.99	16.45	20.98	16.50
January, 1917	18.58	16.49	18.81	16.30	19.08	16.55	19.10	16.50
February	16.22	15.58	17.00	13.72	17.25	12.50	17.00	13.90
March	18.58	15.99	19.25	16.72	19.18	16.48 18.72	18.99	18.53
May	21.50	18.49	21.70	18.64	21.50	19.35	21.80	10.33
June	27.18	21.16	27.37	21.48	27.45	22.10	27.28	21.50
July	27.15	23.35	27.32	23.45	27.48	23.55	27.45	24.75
Season	27.18	13.34	27.37	13.47	27.48	12.50	27.45	13.90

## OPTIONS ON THE NEW YORK COTTON EXCHANGE

Aug	UST	SEPTE	MBER	Осто	BER	DECE	MRER	
DELI		DELI		DELF		DELI		
								During Month of
High	Low	High	Low	High	Low	High	Low	
High	Low	111511	LOW	High	LOW	mgn	LOW	
								Season of 1914-15
	-		_	-	_	_	-	August, 1914
_	-		-	-	-	_		September
-		-	_	_	_	-	-	October
-	-		_	_		7.48	6.85	(old contract) November
8.02	8.02	_	-	8.50	7.98	' - '	-	(new contract) November
_	-	-		-	-	7.49	6.65	(old contract) December
7.85	7.83	-		8.48	7.70			(new contract) December
_	_	_	_		<i>'</i> – <i>'</i>		_	(old contract) January, 1915
9.20	8.49	9.25	8.72	9.50	8.44	9.63	8.60	(new contract) January
_		_	_	_		-	_	(old contract) February
0.22	8.74	0.20	8.79	9.40	8.77	9.53	8.93	(new contract) February
10.14	8.73	9.38	9.38	10.50	8.85	10.07	9.05	March
10.67	10.13	10.78	10.30	10.02	10.10	11.08	10.34	April
10.20	9.45	10.50	10.43	10.60	9.46	10.76	9.70	May
9.70	9.43	0.80	9.47	10.00	0.60	10.26	9.70	June
9.52	8.48	9.30	8.74	9.86	8.75	10.08	9.03	July
9.5=								
	_	_	_	_	_	7.49	6.65	(old contract) Season
10.67	7.83	10.78	8.72	10.02	7.70	11.08	8.60	(new contract) Season
								Season of 1915-16
9.15	8.86	9.30	8.95	10.02	0.10	10.30	9.39	
12.86	11.50	9.69	9.69	12.22	9.67	12.88	9.99	September
13.40	12.13			12.72	11.58	13.00	11.70	October
12.01	11.80	12.46	11.62	12.02	11.55	12.37	11.28	November
13.12	12.33	12.70	12.10	12.80	11.00	12.61	11.64	December
12.80	12.20	12.70	12.25	12.86	I 2.00	12.00	12.23	January, 1916
12.48	11.50	12.40	11.65	12.45	11.63	12.58	11.77	February
12.33	11.65	12.20	11.00	12.38	11.70	12.54	11.85	March
12.22	12.00	12.22	12.04	12.32	11.03	12.48	12.10	April
13.31	12.24	13.30	12.47	13.39	12.27	13.53	12.44	
13.43	12.61	13.39	12.60	13.47	12.62	13.01	12.78	June
13.18	12.72	13.25	12.87	13.37	12.84	13.55	13.02	July
						-3.33		
13.43	8.86	13.39	8.95	13.47	9.10	13.61	9.39	Season
								Season of 1916-17
1105	T 2 0 =	16.20	12.10	16.22	12.10	16.40	12.28	August, 1916
14.95	12.95	16.30	13.40	16.33	13.10		13.28	
_	_	16.30 17.80	14.88	16.50	14.81	16.47	14.95 16.15	September
20.70	10.68		16.52	19.55	15.85	19.75		November
20.70	19.68	19.45	17.15	10.20	16.93	21.00	18.64	TO 1
20.49 18.40	16.45	18.84	15.40	18.83	15.00	20.42	16.13	
	16.52	17.75	16.00	17.58	15.62	17.69	15.73	January, 1917 February
16.57	14.60	16.14	14.00	16.60	13.65	16.36	13.77	3.5 1 *
18.95	16.32	18.63	16.05	18.51	15.82	18.59	15.94	March
21.15	18.54	19.27	18.37	19.75	17.64	19.60	17.74	April
21.60	19.16	21.36	18.60	21.40	18.36	21.49	18.45	May
27.10	21.40	27.05	21.87	27.00	21.03	27.14	21.14	June
27.10	24.05	26.65	23.83	26.90	23.61	27.08	23.50	July
27.10	12.95	27.05	13.40	27.00	13.10	27.14	13.28	Season

### HIGHEST AND LOWEST PRICES PAID FOR THE PRINCIPAL

DURING MONTH OF		UARY IVERY		ARCH IVERY		IAY IVERY		JLY IVERY
	High	Low	High	Low	High	Low	High	Low
Season of 1917–18								
August, 1917	26.20	21.43	26.25	21,62	26.42	21.75	25.95	21.78
September	24.50	10.45	24.70	10.61	24.73	10.70	24.60	19.93
October	27.45	23.43	27.15	23.53	27.14	23.04	27.20	23.75
November	20.83	26.34	20.45	25.00	20.10	25.74	28.92	25.55
December	30.81	27.98	30.35	27.85	30.00	27.60	20,60	27.30
January, 1918	32.44	30.00	31.97	20.00	31.50	29.35	31.30	20.05
February	_	_	31.77	29.88	131.39	29.25	30.97	28.82
March	30.83	20.33	34.10	31.54	33.23	31.08	32.37	30.65
April	32,00	23.70	31.75	25.38	34.50	25.00	33.80	24.60
May	20.30	22.36	25.00	22.53	27.18	23.12	27.24	23.05
June	25.10	22.40	25.08	22.46	25.15	23.30	28.45	24.23
July	25.00	23.14	24.87	23.13	24.86	23.18	29.25	24.45
	-							
Season	32.44	10.45	34.10	10.01	34.50	19.70	33.80	19.93
Season of 1918–19								
August, 1918	35.10	24.00	35.00	24.07	34.80	24.17	34.42	31.97
September	36.35	30.50	36.05	30.42	36.00	30.42	35.40	30.60
October	33.00	27.30	32.95	26.05	32.84	26.75	32.58	26.62
November	20.50	25.30	20.08	24.45	28.70	24.05	28.30	23.75
December	30.45	24.53	20.10	23.60	28.36	23.20	27.76	22.05
January, 1919	30.00	21.00	28.45	20.05	27.50	20.00	26.58	19.15
February	20.35	18.20	24.25	20.80	23.10	10.80	22.50	10.30
March (old contract)	21.10	10.00	28.25	21.70	24.50	20.85	23.51	20.23
March (new contract)	22.15	19.05	-	-	25.20	21.75	23.75	20.00
April (old contract)	20.50	20.14	-		27.50	27.15	27.20	22.20
April (new contract)	24.00	20.10	24.30	20.15	28.90	25.00	27.20	22.55
May (new contract)	31.70	23.53	31.45	23-35	31.00	27.68	32.80	20.15
June (new contract)	34.00	26.93	33.87	20.70	33.52	28.95	34.40	28.55
July (new contract)	30.10	31.38	30.18	31.30	36.00	31.45	35-95	32.00
Season (old contract)	30.35	18.20	30.05	20,80	36.00	10.80	35.49	19.15
Season (new contract)	30.10	19.05	36.18	20.15	30.00	21.75	35.95	20.90
Savage of Larry 22								
Season of 1919–20 August, 1919	35.20	20.86	35.28	20.00	35.20	20.00	32.07	31.00
September	33.02	28.08	33.21	28.25	33.28	28.45	33.00	28.50
October	30,22	30.65	35.66	30.75	35.35	30.84	34.80	31.25
November	37.80	33.00	37.26	31.15	36.73	30.20	36.34	29.35
December	38.10	34.02	30.32	31.84	34.60	30.50	32.95	29.20
January, 1920	38.86	37.00	37.21	35.55	35.65	33.55	33.96	31.59
February	20.00	27.25	38.25	33.75	35.32	31.50	32,96	29.49
March	32.48	28.76	43.18	37.85	30.80	34.60	36.90	32.05
April	35.28	32.50	34.35	32.00	42.50	39.00	40.25	36.80
May	35.48	32.38	34.88	32.00	42.98	38.80	30.41	30.05
June	34.93	30.06	34.43	30.43	34.08	29.95	38.90	35.25
July	32.78	20.18	31.00	28.00	31.25	28.40	43.75	38.00
Season	38.86	27.25	43.18	28.25	42.98	28.40	43-75	28.50

### OPTIONS ON THE NEW YORK COTTON EXCHANGE

	GUST IVERY		EMBER IVERY		OBER IVERY		EMBER IVERY	DURING MONTH OF
High	Low	High	Low	High	Low	High	Low	
27.27 26.22 28.38 29.33 30.37 30.34 31.93	23.02 	26.20 23.70 - - - 28.23 30.50	21.70 20.82 - - - 28.23 30.48	26.50 24.90 29.50 27.43 28.70 30.10 29.03 31.22	21.40 19.80 24.10 26.76 26.22 27.80 27.45 29.62	26.21 24.00 28.12 30.50 30.73 30.00 20.70 30.98	21.46 19.53 23.60 27.05 28.75 27.65 27.28 20.40	Season of 1017-18
33.50 26.78 28.00 27.25	24.50 23.05 24.18 24.45	32.93 26.25 26.00 26.65	25.00 23.00 23.00 24.70	32.48 26.55 25.75 25.92	23.90 22.51 22.78 23.65	32.16 26.42 25.30 25.22	23.80 22.44 22.53 23.25	
33.50	23.05	32.93	20.82	32.48	19.80	32.10	10.53	Season
32.80 34.55 31.90 27.85 20.25 25.60 21.33 23.00 22.00 24.00 31.67 33.65 35.70	25.00 29.85 26.80 22.80 22.30 18.05 20.00 20.24 21.10 23.05 22.30 25.38 28.20 32.10	34.43 36.35 28.80 27.40 25.70 23.68 20.00 22.38 22.48 24.12 25.66 31.80 33.07 35.05	26.47 33.10 25.00 22.00 21.05 18.10 18.05 19.04 20.10 20.60 21.11 25.30 27.05 33.35	35.70 37.25 33.90 26.00 25.35 24.08 22.40 22.40 24.90 25.55 32.20 34.43 36.00	24.80 31.20 30.40 21.00 21.00 18.02 18.40 19.00 10.45 20.41 20.60 24.28 27.52 31.85	35.30 30.50 33.25 30.35 32.00 20.85 20.50 22.10 22.17 23.00 24.90 31.85 34.30 30.23	24.23 30.70 28.05 26.00 25.70 17.00 18.20 18.00 20.00 20.20 23.84 27.20 31.05	Season of 1918–19
32.70 32.20 33.08 35.00 31.30 32.25 32.00 34.85 38.50 38.70 38.50	29.60 28.90 31.65 28.00 29.00 30.03 29.00 31.10 35.92 36.00 34.45 34.00	34.38 31.39 32.80 33.75 30.50 31.10 34.25 37.50 36.85 35.40 36.60	20.70 28.60 31.00 28.00 28.00 28.80 30.40 28.80 30.50 35.50 34.80 33.43 33.97	35.50 32.00 37.25 32.00 29.85 31.40 30.78 33.80 37.25 36.85 36.70 35.31	20.75 27.95 30.40 27.60 27.60 27.62 20.30 27.62 20.70 33.77 34.15 32.70 31.27	35.35 32.95 37.90 38.50 40.00 30.90 30.20 33.05 36.20 35.08 35.04 33.00	20,80 28,11 30,60 35,00 53,00 27,20 20,12 33,00 33,05 31,61 30,00	Season of 1919-20   August, 1919   September   October   November   December   January, 1920   February   March   April   May   June   July   Season

## PRICES OF COTTON YARNS AND SPOT COTTON DAY BY DAY DURING 1920

(Compiled by Frederick B. Macy & Co., New Bedford)

## SHARP RISE IN JANUARY

Staple Cotton	); ,	I	1 6	80.78	1	ı	1	1	.82	1	1	ı	۱,	.85	1	1	I	I	1	1 8	.86	ı	!	i	1	1	
Mid. Up. Spot Cotton N. V.	In Cents	39.25	39.25	39.25	39.25	30.00	39.25	39.25	39.25	39.25	30.25	39.25	39.25	39.25	30.25	39.75	39.55	38.75	39.10	39.30	39.25	39.15	30.05	39.50	39.50	39.50	39.00
ARPS	s09	3.40	3.40	3.40	3.40	3.40	3.40	3.45	3.50	3.50	3.60	3.60	3.60	3.65	3.65	3.65	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Combed Two-Ply Warps	20s	\$3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.10	3.10	3.10	3.15	3.15	3.15	3.20	3.20	3.20	3.25	3.25	3.30	3.30	3.30
ер Тwo	sot	\$2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.55	2.55	2.55	2.55	2.55	2.60	2.60	2.60	2.60	2.60	2.65	2.75	2.75	2.75	2.75	2.75
Сомв	308	\$2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.10	2.10	2.10	2.10	2.25
ARPS	soo	\$3.15	3.15	3.15	3.15	3.15	3.15	3.20	3.25	3.25	3.30	3.30	3.30	3.40	3.40	3.40	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
COMBED SINGLE WARPS	Sos	\$2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75							3.00										
BED SIN	sot	\$2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.30	2.30	2.35	2.35	2.35	2.50	2.50	2.50	2.50	2.50	2 50	2.50	2.50	2.50	2.50	2.50
Сом	308	\$1.90	1.90	1.90	1.90	1.00	1.00	1.90	1.90	1.90	1.90	1.95	1.95	1.95	1.95	1.95	2.00	2.00	2.00	2.00	2.00	2.00	2.05	2.05	2.05	2.05	2.10
ARPS	408	\$1.60	1.60	1.60	1.60	1.60	09.1	1.60	1.60	1.60	1.65	1.65	1.65	1.70	1.70	1.70	1.75	1.80	1.80	1.90	ĭ.90	1.90	2.00	2.00	2.00	2.00	2.00
Carded Two-Ply Wards	308	<b>\$1.1</b> 2	1.12	1.12	1.12	I.12	1.12	1.12	1.15	1.15	1.18	1.18	1.18	1.18	1.18	1.18	1.20	1.20	1.20	1.20	1.20	1.25	1.30	1.30	1.30	1.30	1.30
ер Тw	205	\$0.00	06.	00.	00.	9.	88.	88.	.88	88.	.88	00.	06.	06.	00.	00.	.02	.02	.92	.92	.02	.92	.05	86.	86.	86.	1.00
CARD	Ss	\$0.70	.70	.70	.70	.70	.71	.71	17.	.71	.72	.72	.72	.72	.72	.72	.73	.7.3	-73	.73	.73	.73	.73	.73	.73	.73	.73
VRPS	so+	\$1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.55	1.55	1.55	1.60	1.60	1.60	1.65	1.65	1.05	1.70	1.70	1.70	1.75	1.75	1.75	1.80	1.80
Carded Single Warps	308	\$1.10	1.10	I.IO	1.10	1.10	1.10	I.IO	1.10	1.10	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1,15	1.20	1.25	1.25	1.25	1.25	1.25
ded Sin	208	\$0.87	.87	8,	.87	8	8.	S	s.	8	.87	.88	88.	00:	00.	00.	00.	90.	00:	00.	00.	9.	.02	.02	.02	.02	.04
CAR	SS	\$0.68	.68	99	99	99	70	.70	.70	70	.7.2	.72	.72	.72	.72	.72	.70	.70	.7.2	.72	.7.2	.1.	.13	.73	.73	.73	.73
		January 2	January 3	January c	January 5	January 7	January 8	January o	January 10	January 12	Fanuary 13	January 14	January 15	January 16	January 17	January 10	January 20	January 21		January 23	January 24			January 28	January 20	January 30	January 31

(Compiled by Frederick B. Macy & Co., New Bedford)

## MODERATE ADVANCE IN FEBRUARY

CARDED SINGLE WARPS   CA			CA	RDED	CARDED TWO-PLY WARPS	LY WA	RPS	Сомв	Combed Single Warps	LE WA	RPS	Сомве	COMBED TWO-PLY WARPS	PLY W	ARPS	Mid. Up. Spot	Staple
8s 20s 30s 40s 8s 20s	40s 8s	- SS		50S		308	tos	308	4os	208	soy	308	408	505	soo	N.Y. In Cents	13/16"
等0.73 等0.03 等1.30 等1.90 等0.74 等0.08 等	\$1.30 \$1.90 \$0.74 \$0.08	£0.08	£0.08			\$1.30 \$	\$2.10 €	\$2.03 €	\$2.50	3.15	92	\$2.10		3-35	33.70	39.15	ı
06.1	1.90 .74	.74		.0s		1.30	2.10		2.50	3.10	3.50	2.10	2.75	3.35	3.70	38.60	
1.90	1.90	+1.		80.		1.30	2.10	2.05	2.50	3.10	3.50	2.10		3.35	3.70	37.55	
1.90 1	1.90 1		.74 .08	.os		1.30	2.10		2.45	3.10	3.50	2.10	_	3-35	3.70	37.80	
1.90	1.90		.74 .08	SO:		1.30	2.10		2.45	3.10	3.50	2.10	2.70	3.35	3.70	37.80	ı
.74	1.90	.74	.74 .08	.os		1.30	2.10	2.03	2.45	3.10	3.50	2.10		3.35	3.70	38.00	\$0.88
1.95 .74	1.95 .74	· 77	.74 1.00	1.00		1.30	2.25		2.45	3.10	3.50	2.10		3-35	3.70	38.00	I
1.95 .74	1.95 .74	-74	.74 1.00	I.00		1.30	2.25		2.45	3.10	3.50	2.10	2.70	3.35	3.70	37.75	ı
1.95	1.95	.74		I.00		1.30	2.25		2.45	3.10	3.55	2.10		3.35	3.75	37.75	ı
1.95 .74	1.95 .74	+7.		1.00		1.30	2.25		2.45	3.10	3.55	2.10		3.35	3.75	Closed	ı
.93 1.30 1.95 .74	1.95 .74	+1.		I.00		I.30	2.25		2.45	3.15	3.55	2.10		3.40	3.75	38.45	ı
.93 I.30 I.95 .74	1.95 .74	+7.		1.00		1.30	2.25		2.45	3.15	3.55	2.10		3.40	3.75	38.75	.83
.93 1.30 1.95	1.95 .74	.74		1.00		1.30	2.25		2.45	3.15	3.60	2.15		3.40	3.80	38.95	ı
.93 1.28 1.95 .74	1.95 .74	.74	.74 1.00	1.00		1.30	2.25		2.45	3.15	3.60	2.15		3.40	3.80	39.40	1
.04 1.28 1.95 .74	1.95 .74	.74	.74 1.00	1.00		1.30	2.25		2.45	3.15	3.60	2.15		3.40	3.80	30.00	1
.04 1.28 1.05 .74	1.28 1.95 .74	.74	.74 1.00	1.00		1.30	2.25		2.45	3.15	3.60	2.15		3.40	3.80	39.20	1
.04 1.28 1.95 .74	1.28 1.95 .74	-74	.74 1.00	1.00		1.30	2.25		2.45	3.15	3.60	2.15		3.40	3.80	30.00	1
.73 .94 I.28 I.95 .74 I.00	1.28 1.95 .74	-7.4	.74 1.00	1.00		1.30	2.25	2.15	2.45	3.15	3.60	2.20		3.40	3.80	Closed	ss.
.04 I.30 I.95 .74	1.30 I.95 .74	.74	.74 1.00	1.00		1.30	2.25		2.45	3.15	3.60	2.20		3.40	3.80	39.35	ï
.03	1.95 .74	.74	.74 1.00	1.00		1,30	2.25		2.50	3.15	3.60	2.20		3.40	3.80	40.10	I
.93 1.30	2.00 .75	1.75	.75 1.00	1.00		1.30	2.25		2.50	3.15	3.60	2.23		3.40	3.80	39.85	ı
.73 .93 1.30 2.00 .75 1.00	2.00, .75	75 I	.75 1.00	1.00		1.30	2.25		2.50	3.15	3.60	2.25		3.40	3.80	39.65	ı
.73 .93 1.30 2.00 .75 1.00	2.00 .75 I	.75 I	.75 I.oo	I.00		1.30	2.25		2.50	3.15	3.60	2.25		3.40	3.80	40.00	.88

PRICES OF COTTON YARNS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by Frederick B. Macy & Co., New Bedford)

## PRICES REACTED IN MARCH

Staple Cotton 1 3/16"	ı		ı	-	1	1	\$0.90	I	1	ı	ı	ı	06.	. 1	1	1	1	ı	.92	1	1	ı	1	ı	:03	I	!	1
Mid. Up. Spot Cotton N.Y. In Cents	200	01.0	40.50	40.75	40.05	10.00	10.00	40.00	40.75	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.00	41.25	43.00	43.25	42.00	41.50	41.50	41.50	41.50	41.50	41.75
ARPS	ος. •	000	3.00	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.75	3.75	3.75	3.75	3.75	3.70	3 70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.65	3.65	3.65
-PLY W	2		2.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.40	3.30	3.30	3.30	3.30	3.30	3.30	3.30
COMBED TWO-PLY WARPS	1/ 1-	2 1	C/.7	2.75	2.75	2.75	2.75	2.75	2.75	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.(10	2.00	2.00	2.00	2.00	2.55	2.55	2.55	2.55	2.55	2.55	2.55
Combi	2/ C	0 1	57.7	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.20	2.20	2.20	2.20	2.20	2.20
ARPS 60s	2.00	000	3.00	3.00	3.00	3.00	3.60	3.00	3.00	3.00	3.60	3.55	3.55	3.55	3.55	3.55	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
GLE WA	¥. €€	2 -	5.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.10	3.10	3.10	3.10	3.10	3.10	3.10
COMBED SINGLE WARPS	0 √ 3	1	00.7	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.45	2.45	2.45	2.45	2.45	2.40	2.40	2.40	2.40	2.40	2.35	2.35	2.35	2.35	2.35	2.35	2.35
Come	≥. I ×	) L	5.15	2.15	2.15	2.15	2.15	2.10	2.10	2.10	2.10	2.05	2.05	2.05	2.05	2.05	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
ARPS	52.10	7	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.08	2.08	2.08	2.08	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
-PLY W	08.1€	1 20	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
CARDED TWO-PLY WARPS 85 208 308 408	\$0.08			00.	1.00	1.00	1.00	I.00	S().	80.	86.	86.	86.	S().	.9S	86.	.03	.95	.95	.05	.95	.95	.95	.95	.05	.95	.95	.95
CARDI	₹0.73	1.	0/.	.73	.73	.73	.73	+7.	+7.	+1.	+7.	+7.	-74	+7.	+/.	-74	.75	.75	.75	.75	.75	.75	.75	.74	+1.	-74	-74	.74
ARPS 40s	€2.00	0	3	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	5.00	2.00	2.00	2.00	2.00	2.00
CARDED SINGLE WARPS	\$1.30	ox.	011	1.28	1.28	1.28	1.28	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
SED SIN	\$0.06	90	5	06.	06.	96.	90.	.05	.95	.03	.05	.95	.05	.03	.05	.95	+6.	+6.	+6.	.95	†6·	+6.	<del>+</del> 6·	+6.	+0.	10.	÷6:	·6·
CARI 8s	\$0.73	1.2	C/.	.73	.73	.73	.73	.73	.72	.70	.72	-74	.74	.74	.74	+1.	.73	73	.73	.73	.73	.73	.73	.72	.72	.72	.7.3	.72
							:									:							:		:			
							•			:		•						:										
	Ι.	ć		٠,	· +	10		· 0	6	10.	. 11	I 2 .	13.		. 01		18.	. 61	50.	. 22	23 .	24.	. 23	20.	27.	29 .	30.	31.
	March	March	Moroh	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March	March

(Compiled by Frederick B. Macy & Co., New Bedford)

## COARSE YARNS ADVANCED, FINE YARNS DECLINED, IN APRIL

### COMBED SINGLE WARPS COMBED TWI-PLY WARPS	Mid. Up.	Spot Staple Cotton Cotton N.Y. 13/16"	Closed So.92  Closed So.92  Losed So.93  Los	
South Single Wars (Arribly Wars) (Course Single Wars)  208 308 408 1 85 208 308 408 308 408 308 408 308 608 608 608 608 608 608 608 608 608 6	Two-Pex Warps	50s 60s		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
South Single Warrs   Carded Two-Ply Warrs   Course Single Wigner   Carded Two-Ply Warrs	COMBED			2.10
South Single Warrs  208 308 408 1 85 208 308 408 308  South Silves Silves 1 88 208 308 408 308  304 1.25 2.00 36.74 36.05 31.25 32.05 2.04  304 1.25 2.00 374 405 1.25 2.05 2.04  304 1.25 2.00 374 405 1.25 2.05 2.04  304 1.25 2.00 374 405 1.25 2.05 2.04  305 1.30 2.00 374 405 1.30 2.10 2.05  307 1.30 2.00 374 405 1.30 2.10 2.00  308 1.30 2.00 374 405 1.30 2.10 2.00  308 1.30 2.00 374 405 1.30 2.10 2.00  309 1.30 2.00 374 405 1.30 2.10 2.00  301 1.30 2.00 374 405 1.30 2.10 2.00  301 1.30 2.00 374 405 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 374 406 1.30 2.10 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.00  301 1.30 2.00 375 408 1.35 2.15 2.15  301 1.30 2.10 2.10 2.10 2.10 2.10 2.10 2.10 2.1	SINGLE WARPS	508		
\$\text{SOGLE WARPS}\$  \[ \text{SOAQL \$\text{SL25} \$\text{\$\text{SL20}\$} \text{\$\text{SOAQL}\$} \text{\$\text{SL25}\$} \text{\$\text{SOAQL}\$} \text{\$\text{\$\text{SOAQL}\$} \text{\$\text{SOAQL}\$} \text{\$\text{SOAQL}\$} \text{\$\text{\$\text{SOAQL}\$} \text{\$\text{SOAQL}\$} \text{\$\text{\$\text{SOAQL}\$} \text{\$\text{SOAQL}\$} \$\text{SOAQL	COMBED S			
208 308 408-108-108-108-108-108-108-108-108-108-1	o-Ply Warps		₹:	
208 308 408- 50-4 \$1.25 \$2.00 	CARDED TW			
CARDED SINGLE  SS 208.3  3 204 51  73 304 11  73 304 11  73 304 11  73 304 11  73 304 11  73 304 11  74 308 11  75 308 11	E WARPS			
2 % 6 % CKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK	RDED SINGE	,		. 60. . 60. 70.
	- C	 %	*	73
			T N M M C L T M C D N M T M C L T C D N C	

(Compiled by Frederick B. Macy & Co., New Bedford)

## MOST VARIETIES OF YARNS LOWER IN MAY

Staple	13/16"	1	\$0.07	1	1	ı	1	1	70.	1	1	ı	1	1	Nomina	1	1	1	1	1	Nomina	1	1	ŀ	1	ı
Mid. Up. Spot Cotton	N.Y. In Cents	Closed	41.45	41.60	41.75	41.50	41.10	41.30	41.30	41.15	41.40	41.30	41.15	41.60	42.00	42.60	43.00	43.00	41.00	40.50	40.00	10.00	40.00	40.00	10.00	Closed
ARPS	soo	§3.60	3.50	3.50	3.50	3.40	3.40	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.35	3.30	3.28	3.25	3.25	3.15	3.10	3.05	000
Combed Two-Ply Warps	Sos	•	3.25			3.25		_								3.15		_	_	3.00	_		_		2.88	
ер Тwo	sot	\$2.50	2.50	2.50	2.45	2.45	2.45	2.45	2.45	2.40	2.40	2.40	2.40	2.40	2.35	2.35	2.30	2.35	2.25	2.25	2.25	2.25	2.25	2.20	2.20	000
Сомв	308	\$2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.05	2.05	2.05	2.05	2.05	2.05	2.00	,
ARPS	900	\$3.35	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.30	3.30	3.25	3.25	3.20	3.20	3.10	3.00	3.00	20.5
Combed Single Warps	\$0S	\$3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.95	2.95	2.05	2.95	2.95	2.05	2.95	2.05	2.90	2.90	2.90	2.90	2.00	2.88	2.85	2.85	S
bed Sir	408	\$2.10	2.10	2.10	2.15	2.15	2.15	2.15	2.15	2.25	2.25	2.25	2.25	2.30	2.30	2.30	2.30	2.30	2.25	2.25	2.20	2.20	2.18	2.16	2.16	2.15
Сом	308	.0 0.0	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.95	1.05
VARPS	sc+	\$2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.12	2.12	2.10	2.10	2.08	2.08	2.08	2.08	20.5
Carded Two-Ply Warps	308	<b>≸</b> 1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.32	1.30	1.28	1.28	1.28	2, 1
ED TWG	208	\$0.08	86.	86.	86.	1.00	1.05	1.02	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	I.00	1.00	86.	96.	.95	.95	.95	.95	90
CARD	æ	\$0.75	.75	.75	.75	.75	.75	-75	.75	.75	.76	.76	94.	94.	.75	.75	.75	.74	.74	.74	.74	.74	.74	.74	.74	7.
ARPS	50†	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.08	2.08	2.05	2.03
Carded Single Warps	308	\$1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.28	1.28	1.28	1.28	1.30
DED SE	208	\$0.97	76.	.97	.07	86.	86.	86.	86.	86.	86.	.98	86.	86.	86.	86.	86.	96.	96.	96.	96.	.05	.05	·6·	÷6.	50.
CAR	Ss.	\$0.73	.73	.73	.7.3	.73	.73	.73	.73	.73	.74	.74	.74	.74	.72	.72	.72	.72	.72	.72	.72	.72	.72	.72	.72	.73
																					:					
		Ι.	3.	4	ıo.		۲~	·	. 01	ı.	12.	13 .	<del>-</del>			. 81		20.		· :1	+	25	. 9	7	Š.	0
		Íay	May	lay	Iay	Iay	Iay	Iay	Іау і	fay 1	Iay I	Iay 1	Iay 1	lay 1	fay 1	lay 1	lay 19	lay 2	$lay z_I$	lay 22	Iay 2	Iay $^2$	Iay $^2$	Iay 2	Iay 2	fav 2

(Compiled by Frederick B. Macy & Co., New Bedford)

## SHARP DECLINE IN JUNE

Staple	Cotton I 3/16"		1	Nominal	ı	ı	ı	1	Nominal	1	ı	1	I	1	Nominal	ı	1	1	ı	1	Nominal	1	1	ı	1	1	ı	1
Mid Up.	Cotton N.Y. In Cents		40.00	40.00	40.00	40.00	10.00	10.00	40.00	1c.00	40.00	10.00	10.00	30.50	30.50	39.25	39.25	39.25	39.25	38.75	38.25	38.25	37.75	38.25	38.25	38.75	38.75	38.75
ARPS	so9		\$3.00	3.00	3.00	3.00	2.05	2.05	2.90	2.90	2.80	2.80	2.75	2.75	2.70	2.70	2.65	2.65	2.60	2.60	2.60	2.60	2.58	2.58	2.50	2.45	2.42	2.40
COMBED TWO-PLY WARPS	208		\$2.85	2.85	2.85	2.85	2.85	2.80	2.80	2.80	2.70	2.70	2.60	2.60	2.45	2.45	2.40	2.40	2.35	2.35	2.35	2.35	2.34	2.34	2.34	2.30	2.28	2.28
ED TWO	sof		\$2.20	2.20	2.15	2.15	2.10	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.04	2.04	2.04	2.05	2.00	2.00	2.00	2.00	2.00	2.00	1.95	1.05	1.92	06.1
COMB	308		\$ 2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.08	96.1	1.92	1.92	1.00	1.90	1.00	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.80	1.75	1.74	1.74
ARPS	sog		\$2.95	2.05	2.05	2.95	2.90	2.00	2.85	2.85	2.80	2.78	2.75	2.70	2.05	2.60	2.55	2.55	2.50	2.50	2.50	2.50	2.50	2.50	2.45	2.40	2.38	2.35
COMBED SINGLE WARPS	Sos		\$2.84	2.82	2.80	2.80	2.80	2.75	2.75	2.75	2.72	2.70	2.60	2.50	2.40	2.40	2.35	2.35	2.30	2.30	2.30	2.30	2.30	2.30	2.25	2.25	2.25	2.20
3ED SIN	sof		\$2.12	2.15	2.10	2.10	2.05	2.00	2.00	2.00	86.1	1.98	1.98	1.98	96.1	96.1	1.05	1.95	1.95	1.95	1.95	1.95	1.95	1.05	1.00	1.88	1.86	1.85
Сом	308		\$1.95	1.95	1.95	1.05	1.05	1.05	1.05	1.05	1.04	1.92	06.1	1.00	1.85	1.85	1.85	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.75	I.7c	1.08	1.05
ARPS	sot		\$2.08	2.03	2.05	2.00	2.00	1.95	1.05	1.95	1.86	1.86	1.84	1.84	1.82	1.80	1.80	1.80	1.80	1.75	1.70	1.05	1.05	1.03	1.05	1.05	1.05	1.65
-PLY W	308			1.28	1.28	1.25	1.25	I.22	1.22	I.23	I.22	1.22	1.20	1.20	1.18	01.1	1.16	1.16	1.15	1.14	1.12	1.12	I.I2	1.12	1.12	1.10	1.10	1.10
CARBED TWO-PLY WARPS	208	i	. 96.0₹	.05	÷6·	<del>1</del> 6·	<del>1</del> 6·	<del>+</del> 6·	+6.	-04	.92	.92	.92	.02	.92	.92	.92	06.	.00	00.	ss.	ss.	SS.	×.	SS	S.		
CARDE	ss.		<b>.</b> €0.73	.73	.73	.72	.72	.72	.72	.72	.7.3	.72	.72	-72	:12	.71	.71	.71	.71	.71	.71	.71	.71	.71	.71	.70	.70	.70
RPS	50+		\$2.05	2.00	2.00	1.05	1.05	06.1	06.1	1.90	1.80	1.80	1.80	1.78	1.75	1.72	1.70	1.70	1.03	to.1	1.02	00.1	1.00	1.00	1,00	I.()0	1.00	1.00
CARDED SINGLE WARPS	308			1.25	1.25	I.22	I.22	I.20	I.20	1.20	1.20	1.20	1.18	01.1	1.15	I.I2	1.12	1,12	1.10	1.10	1.10	01.1	1.10	1.10	1.10	1.05	1.05	1.05
ED SING	208		₹0.05	.93	.93	.63	.02	.02	.02	.92	06.	00.	06.	00.	00.	06.	00.	× 5	× .	Š.	ž.	ž.		50.0	Š	Š	ž.	s, is
CARD	ss ss		₹0.72	.72	.72	.72	.72	.73	.72	.72	.7.2	.7.5	.72	.7	? .	.71	17.	.71	.71	.71	.70	.70	.70	.70	.70	.70	.70	.70
		9																				:						
			June 1	June 2	June 3	June +	June 3	June 7	une s	June 9	June 10	June 11	June 12	June 14	June 15		June 17	June 18	June 19			June 23 June 23						June 30

PRICES OF COTTON YARNS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by Frederick B. Macy & Co., New Bedford)

## BIG DROP IN VALUES IN JULY

Staple	Cotton 1 3 16"		1	I	1	Nominal	ı	ı	1	1	I	Nominal	!	1	1	ı	1	Nominal	ı	ı	ı	1	I	\$0.87	1	ı	1	1	
Mid. Up. Spot	Cotton N.Y. In Cents		39.25	39.75	Closed	10.00	41.00	40.50	40.50	40.50	10.50	41.00	45.00	42.50	42.50	42.25	42.25	43.00	43.00	43.75	43.75	42.00	10.00	10.00	40.00	10.00	40.00	40.00	
ARPS	5C()	e	\$2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.30	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	
COMBED TWO-PLY WARPS	50	e	\$2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.20	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	
ed Two	sct	6	31.35	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.80	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	
Comb	305		JI.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	07.1	1.70	07.1	02.1	1.05	09.1	09.1	1.60	00.1	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
RP ;	seq	č	2.30	2.30	2.30	2.30	2.30	2.28	2.28	2.28	2.25	2.25	2.25	2.25	2.23	2.25	2.30	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	
Combed Single Warps	ος ο		23.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.10	2.10	2.10	2.10	2.10	2.IC	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	
ED Stre	5C+	c	00.10	1.80	1.80	1.80	1.80	1.80	1.80	1.78	1.78	1.75	1.75	1.75	1.75	1.75	1.70	07.1	1.70	1.65	1.65	1.65	09.1	1.00	1.60	1.00	1.00	09.1	
Comb	308		_	1.60	00.1	1.60	1.00	00.1	1.60	1.00	1.55	1.55	1.55	1.55	1.55	1.50	1.50	1.48	1.48	1.48	1.45	1.45	1.45	1.40	1.40	1.40	1.40	04.1	
ARPS	45.5		1.75	1.75	1.75	1.00	1.00	1.50	1.50	1.50	1.45	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.38	1.35	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	
CARDED TWO-PLY WARPS	308	1	1.05	1.05	1.05	1.00	1.00	86.	86.	.0s	86.	96.	-05	.05	.93	.9 <i>2</i>	.02	.02	00.	.So	.s.	ŝ.	.86	s.	.86	.86	.se	.86	
o Two-	50.5	. 9	00.00	s.	.86	.85	š.	\$.	*.	×.	<u>s</u> .	.82	s.	8. 8.	.80	62.	.7S	.78	.77	.75	.75	.75	-75	.75	.73	.75	.73	.75	
CARDE	ž				.70	.70	.70	69.	60.	bg:	00.	00.	6g:	00.	60.	6 <u>0</u>	0.0	99.	ę.	99.	90.	99.	99.	99.	.05	.05	.65	.05	
RPS	sot			1.00	1.60	1.50	1.50	1.50	1.50	1.50	1.45	1.40	1.40	04.1	1.40	01:1	1.40	1.40	1.35	1.30	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
Carded Single Warps	305	(	00.1	I.00	1.00	1.00	1.00	.05	:02	.05	.05	.95	.05	+0.	.93	.92	16.	16.	00.	8. 80	s S	SS.	ss.	s s	SS.	ss.	s S	SS.	
ED SINC	20.5	0	5.05 2.05		š.	s.	.85	s.	.S.	.S.	.81	os.	8. 08.	<u>%</u>	08.	.70	.73	.78		.70	.75	.75	.75	.75	.75	.75	.75	.75	
CARD	£	(1	0/.0	.70	.70	69.	60.	.67	.07	20.	.07	.67	.07	20.	20.	90.	00.	.05	50.	† <sub>0</sub> .	†o.	† <sub>0</sub> .	tg:	†g.	<del>†</del> 0.	†9.	† <sub>0</sub> .	tg.	
		fuly y	9 · · · · · · · · · · · · · · · ·	July 2 · · · · ·	July 3 · · · · ·	july 6	July 7	July 8	July 9	July 10	July 12	July 13	July 14 · · · · ·	July 15	July 10	٠. ا	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	July 20	July 21	July 22	July 23	July 24	July 26	July 27	July 28	July 29	July 30	July 31 · · · · ·	

PRICES OF COTTON YARNS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by Frederick B. Macy & Co., New Bedford)

## A FURTHER SLUMP IN AUGUST

Staple Cotton	1.3/1677	S. S.	1000	1	ı	1	ı		. 1			ı		.82	ł	1	1	ł		10.			Ţ	1	07.	1	1
Mid. Up. Spot Cotton	N V. In Couts	10.00	30.50	30.50	30.50	39.50	39.50	30.00	30.00	30.00	30.00	37.50	37.50	30.50	30.00	35.00	34.25	33.50	33.50	32.50	33.50	33.50	33.50	33.50	34.25	32.25	31.75
ARPS	soo	0.20	2.20	2.20	2.20	2.20	2.15	2.15	2.15	2.15	2.15	2.1.5	2.15	2.13	2.10	2.08	2.03	2.05	2.05	2.00	2.00	1.05	1.03	1.00	00.1	1.00	1.00
-PLY V	50×	20	2.15	2.1.5	2.15	2.15	2.15	2.15	2.15	2.10	2.10	2.10	2.10	2.10	50.5	2.0C	2.00	1.00	 	1.75	1.73	1.70	1.70	1.08	1.08	1.08	1.08
Combed Two-Ply Warps	sot	SE:73	1.75	1.73	1.1.2	1.75	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.00	00.1	1.55	1.50	1.50	×+:-	st-1	1.45	1:45	1.45	1:45	1.45
COMB	308	\$ 1.60		1.00	1.00	0().1	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.50	1.48	1.45	1.45	1.40	1.38	1.35	1.35	1.33	1.32	1.32	1.32	1.32
R PS	5005	\$2.20		2.20	2.20	2.20	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.12	2.10	2.05	2.00	2.00	2.00	2.00	2.00	1.95	1.05	1.00	0().1	1.00	1.00
COMBED SINGLE WARPS	30s	3.10	2.10	2.10	2.10	2.10	2.10	3.10	2.10	2.10	2.10	2.10	2.10	2.05	2.00	2.00	1.00	1.80	08.1	1.75	1.7.3	1.70	1.70	1.08	1.08	20.1	1.0S
ž S	sot	¥ 00.18	1.00	1.00	1.60	1.()0	1.00	00.1	00.1	1.00	1.00	00.1	1.(10	1.58	1.55	1.50	1.45	01:1	01.1	04.1	1.40	1.40	1.40	1.40	1.40	1.40	04:1
Comb	308	≸ o†:1≸	1.40	1.40	01:1	1.40	o†.1	1.40	ot.1	01:1	1.40	1.40	01.1	1.40	1.35	1.30	1.28	1.25	1.25	1.25	1.25	1.25	1.25	1.25		1.25	1.25
RPS	÷0+	₹1.30 <b>%</b>	1.30	1.30	1.30	1.30	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.21	1.20	1.15	1.15	1.12	1.15	1.14	1.12	01.1	01.1	.o. I		.0.I
LY WY	30s	₹ 18.0¢	.85	.83	.S3	چ	Š.	ž,	2 2 2 3	Š.	ž.		Ž.	S.			08.			.70	.70	10	.75	.75	:13	:73	
Cyrded Two-Ply Wyrps	208		.7.3	ī /.	01.	.70	0%	.70	07.	07.	0%.	01.	01.	0,'.	07.	01.	00.	S.	.0.	9.	.03	50.	.03	.03	:03	<b>1</b> 0.	00.
CARDED	\$	¥0.03 €	.05	.03	.05	50.		50.	50.	50.	.03	.03	.03	.0.3	:03	.02	I ():	00:	x:	v.	× 10	.50	.30	0,	05	+5:	+
PS	so <del>!</del>	\$1.25 ¥	1.25	1.25	1.23	1.25	1.25	1.25	.23	1.23	1.24	1.24	1.25	.22	1.20	1.15	01.1	.13	.15	†I:	+1-	.1.2	.12	01.	01:	0.0	0.0
L WAR	.30s	\$0.80 ¥						_						- 2 2		~ ~:	ž.			000		.73		.75		5/.	
CARDED STAGLE WARPS	208	¥0.74 ≸	+1.	.72	:13	:72	.73	.72	.73	.7.5	:73	07.	.70	.70	.70	.70	<b>0</b> 0.	.o.	0.		<del>†</del>	50.	.02	.02	0.	00.	00.
Сакре	ž	\$0.63 ≸c	.03	.63	.63	£0:	~ C.	50.	50.		e Ç	.03	So:		£0.	.02 20:	.01	000	.50	10.1	.50	52	.55	10	15.1	è.	55.
		¥.								,																	
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		August	August	. Jaguri	August	, tugust	'August	\ memet	August	August	August	August	August 1.	August	August	August		Vucuet 20		August 2	Vuguet 24	August 25		August 27	August 20	August	C rengary

(Compiled by Frederick B. Macy & Co., New Bedford)

## (Compared by trace) & CO.; tyew Dedicted)

FURTHER DRASTIC DECLINE IN SEPTEMBER

Mid. Up. Spot Spot Coffee	N.Y. In Cents			_	31.75	5 Closed \$0.62\frac{1}{2}	- Closed -	_		_	_	31.75						31.00							26.00			
COMBED TWO-PLY WARPS	so 900s	°		_	0 1.80	5 1.75	0 1.70	5 1.60	0 1.50	0 1.50						-	5 1.50	10			10				-			. 14
vo-PLv	- 20s	89 I	٠.	_	00.1	5. I.S	5 1.50	1.1		ot.1 c	of.1 c	_	5 I.45	D 1.45	5 I.45	_	5 I.45	5 I.45	5 I.45	5 1.45	1.4g	J 1.45	J.1.45		J.45		_	_
IBED TA	sot	÷.		_	o+.1	1.40	J.35	_	-		_	3, 1.30	-	-		-	I.25	1.25	1.25	1.25	Ξ.	07.1	V I.20	07.1	0 1.20	0 1.20	0 I.20	1.20
Сом	308	\$1.20		_	) I.2C	1.20	1.20	J. 1.20	8I.I	_	_	_			-[-	31.1	1.15	_	-	_	_	01.10	01.10	oI.IC	DI.IC	oI.I	OI'I	1.10
VARPS	sog			_	02.1	1.73	1.70	97.1	I.5c	1.50	1.50	_	_	_	1.50	1.50	1.50			_	_	1.50	1.50	1.50	1.50	_		_
NGLE	208	\$0.1 <b>%</b>			I.50	1.45	1.40	1.40	J.40	1.4c	1.40	1.40	1.40	I.40	1.40	1.40	1.40		1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.70
COMBED SINGLE WARPS	so+	\$1.10		_ ′	1.40	1.35	1.25	1.20	1.20	I.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1,20	1.20	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.1
Co	308	% 1.2		1.20	1.20	1.20	1.20	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.15	1.15	1.10	1.10	1.10	I.00	1.00	1.00	1.00	1.00	1.00	COL
ARPS	+0s	%I.08	-	5.5	1.05	1.05	1.05	1.05	1.05	1.00	1.00	1.10	.95	.95	.95	.95	.95	÷6·	÷6·	.92	.92	06.	06.	ss.	ss.	.88	.86	89
-PLY W	308	€0.72	1	1 - 1	.72	.72	.71	.70	80.	.07	.07	99.	99.	99.	.05	.05	.05	.05	.05	†0.	to.	.03	.03	.62	9.	09.	99.	9.
Carded Two-Ply Warps	20S	<b>₹</b> 0.60	9	9.9	00.	00.	00.	00.	9.		.58	.58	.500	.58	.53	.57	.57	.57	.57	.55	.55	.54	•54	.53	.52	.52	.52	5.2
CARDI	88	€0.54	2	S.S.	.53	.53	.53	.53	.53	.52	.52	.52	.51	.51	.51	.51	.51	.51	.51	.50	.50	.50	.50	.50	.50	.50	.48	×.
RPS	50†	.so.1€	× C	30.1	3.	1.08	00.1	1.05	1.00	86.	86.	.0s	.95	.95	.95	.95	.95	÷6:	-6. -	.92	.92	06.	06.	SS.	88	.86	28.	Š
GLE Wa	308	€0.73		1 .	7	.72	-72	.73	.71	.70	60.	80.	.07	.07	90.	.05	.05	.03	.05	.03	50.	.03	.03	00.	00.	00.	.59	.50
CARDED SINGLE WARPS	208	\$0.60	9	2	9.	00.	00.	00.	.58	.59	.59	.57	.57	.57	.50	.50	.50	.50	.50	.54	+0.	+5+	.54	.52	.52	.52	.50	.50
CARD	88	€0.53	7	66.	55.	.53	.53	.53	.52	.52	.52	.51	.50	.50	.50	6+.	6+.	6†-	6†-	6†:	6+.	64:	6†:	7	27.	\$	.+7	.47
		September 1	September 2	Sentember 2	eptember 3 · · ·	September 4 · · ·	eptember 6	September 7 · · ·	september 8		september 10	september 11	September 13	September 14	eptember 15 · · ·	September 10	September 17	September 18	September 20	September 21	September 22 · · ·	eptember 23 · · ·	September 24	September 25	September 27	september 28	September 29	eptember 30 · · ·

(Compiled by Frederick B. Macy & Co., New Bedford)

## NEW LOW LEVELS TOUCHED IN OCTOBER

Staple	Cotton I 3/16"		C	ì	1	ı		01:	- 1	1	ï	1		j 1				1	.31				ı	1	.3.2	1
Mid. Up.	Cotton N.Y. In Cents	100	24.25	24.25	21.25	25.25	25.25	24.50	21.00	23.00	23.00	22.50	22.00	21.00	20.50	20.50	20.50	20.50	21.00	21.50	22.50	22.70	22.15	22.00	22.20	22.00
ARPS	sog	C V	1.50	1.50	I.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	I.50	1.50	1.50	1.50	1.50	1.50	1.50
Сомвер Тwo-Ply Warps	508		1:45	1.45	1.40	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
эр Тисо	sot	\$1.20	1.20	1,20	1.18	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.14	1.14	1.14	1.14	1.I.4	†1.I	1.I.4	1.12	1.12	1.12	01.1	01.1	01.1	01.1
COMBI	308	01.18		1.10	80.1	1.05	1.05	1.03	1.10	1.03	1.00	1.00	00.I	86.	86.	86.	s6.	90.	90.	90:	.05	+6.	.03	.93	.0.3	.03
SA	809	05.16		1.50	1.50	84.1	1.48	1.48	1.48	84.1	1.48	1.48	St.1	84.1	8+.1	84.1	24:	1.47	1.47	.+7	1.47	94.	04.1	:+3	54	:45
COMBED SINGLE WARPS	50s	\$ 01.15		04.1	04.1						1.38							1.35			I.35 I		I.32 I	_	I.30 I	1.30 I
SINGI			1.15	1.5	71.	01.	01.	_	_	.08		- ::	- 01	- 03		1 20.								10	10	
Сомве		00 \$1.15	1.00.1.	.00 I.	.00	_	_	_	_	.08	)7 1.0	5 1.0	0.5 1.0	.02 1,0	.0.2 1.0	.02 I.0	.02 I.0	-	_	_	00.	.00 1.00	_	_	S.I.O.	8 1.05
	308	96 \$1.00	.86 1.0		). I	_	-	.78	×.	j.	5	)·		5. +	_	•							SS.		ν. ∞	×.
W.ARPS	sc+	0.86			χ. 0				.7	.7	.7		1 .74	1 .7	1.74	1	:7.5			.72		01.	c.		e.	oʻ
70-PLY	308	\$0.60	00.	_		•	.58	•	.58	•	.5		+5+	ķ	ιψ	iç	ż					is:	.s.	.50	.51	.50
Carded Two-Ply Warps	208	÷0.52	.52			.5	S	.50	.50	×+:	×;	-47	15.	:+3	.45			15.	7		+	7	:+5	7	:+5	7
CAR	.so	<b>₹0.4</b> 8	×+:		×+:	0+.	0+	ot:	0+	5+.	:+5	0+:	0	0	0†:	0+-	0 1:	0	0	?	0	0+:	.38	S.S.	ž.	.33
ARPS	0,	60.85	.x.	Š.	. S	%. s	0 0 0 0	× 5	000.	.7.5	-7.3	.7.3	.73	.7.2	.7.3	.73	.72	.72	So.	† <sub>0</sub> .	<del>†</del>	ţ.	50.	50.	.02	.02
Carded Single Warps	308	\$0.50	.50	.59	.55	.57	.57	.57	.57	.57	.53	.52	Š	.55	.52	57.2	.50	.30	.50	.50	.50	.50	?	÷	V	2
ed Sin	208	<b>\$</b> 0.50	.50	.50	× †	?	?	<u> </u>	Т	×;	0+	C+-	<u></u>	0+	0+	0+-	<del>+</del>	7	7	7 1	1	0	0	0	0	0
CARI	ss Ss	\$0.47	:+7		9	01:	15	7		01	.38	.30	200	٠ د د	.30	.30	000	. 50 0 0	000	000	05.	.30	15.	.37	.37	.37
											13													07		
		October	October	October	OCIODE	October	October	Octobor	0.4.1	October	October	October	October 15	October	October 15 October 15	October 19 October 30	October	October	October				Actober	October 26 October 36	Detabor	OCTODO:

(Compiled by Frederick B. Macy & Co., New Bedford)

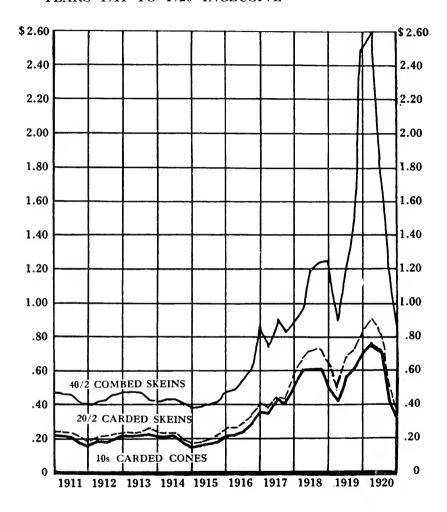
## CONTINUED LIQUIDATION IN NOVEMBER

(Compiled by Frederick B. Macy & Co., New Bedford)

## PRICES WEAKENED FURTHER DURING DECEMBER

Staple	1 3 '16"	1	1	\$0.23	1	1	1	1	ı	.24	!	1	1	1	1	.23	1	ı	ı	ı	ı	.25	1	1	1	ı	.25
Mid. Up. Spot	Cotton N.Y. In Cents	16.65	16.65	10.15	16.30	10.70	16.25	16.25	16.25	16.25	16.25	15.50	15.80	15.80	16.00	10.00	15.05	15.50	15.25	14.50	15.00	15.25	15.00	14.50	15.00	14.00	14.75
VARPS	600	\$1.27	1.25	1.24	I.22	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.15	1.15	1.15	1.15	1.15	1.15
Combed Two-Ply Warps	503	\$1.18	1.15	1.12	1.05	1.05	1.05	1.05	1.05	1.05	1.04	1.04	1.04	1.04	1.04	1.04	1.00	I.00	I.00	I.00	I.00	1.00	I.00	I.00	I.00	1.00	I.00
ер Тw	40.	\$0.87	98.	.86	.86	80	.86	.86	.86	.86	.86	.86	.s.	s.	š.		.85	.85	58.	\$5.	Š.	S	\$	\$	\$ 2	Š.	Š
Сомв	308		.78		92.	.73	.73	.75	15.	.74	.74	+1.	+1.	.74	.7.	.1	.7.	.73	.72	.73	.70	.70	.70	.70	.70	.70	.70
VRPS	909	\$1.25	1.20	1.20	1.18	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.10	1.10	1.10	1.10	1.10	1.10
COMBED SINGLE WARPS	503	¥1.15	1.12	1.10	1.05	1.05	I.00	1.00	I.00	I.00	I.00	1.00	I.00	1.00	I.00	1.00	86.	s6.	.98	86.	86.	.05	.05	.05	.05	50.	.05
3ED SIN	SC+	\$c.85		ž.			š.	ŝ	š	SS:	š.	š	.80	.So	S.	.So	.so	%.	%. %	S	. 11			.77	11.	.77	
Com	308	50.75	1.	+1.	.74	.72	.72	.73	.70	.70	.70	01.	01.	01.	.0S	80.	89.	89.	89.	99.	99.	90.	.05	.05	.05	.05	.05
VRPS	,C+		.52		.52	.52	5.5	.50	.50	.50	.50	.50	.50	05.	\$	×+:	×+:	.+7	.47	÷	04:	04.	4:	4	7	.+5	7
Carded Two-Ply Warps	308	So.42	:+5	:+5	. + 2	:+3	.+2	.42	7	1+:	.+1	· † I	0†.	0+.	0	0†:	.38	.38	.37	.30	.30	.30	.30	.30	.30	.30	.30
D Two	2002		.34	.34	.33	.33	.33	.32	.32	.32	.32	.33	.32	.32	.32	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30
CARDE	×S.	\$0.32	.32	.32	.32	.31	.31	.30	.30	.30	.30	.30	.30	.30	.30	.30	.28	. 2 S	 S.		.38	.28	.27	12.	.27	.27	
\RPS	403	\$0.50	.50	.50	.50	.50	.50	6†:	0+.	6†:	÷:	6†:	0+:	0†:	1.	.+7	<u>+</u>	-+7	:+1	<del>+</del>	<del>†</del>	7	++.	<del>+</del>	<del>†</del>	7	<del>†</del>
Carded Single Warps	308		.+I	+	<u>+</u>	<u>+</u>	1	<u>.</u>	0	<u>o</u> †	0†:	0†:	0+:	.38	 	.38	.37	.37	.37	.30	.30	.30	.35	.35	.35	.35	.33
DED SIN	200		.33	.33	.33	.33	.3.3	.32	.32	.32	.32	.32	.32	.32	.32	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30
C.ARI	∞ .,		.31	.31	.31	08.	.30	.30	.30	.30	.30	.30	.30	.30	.28	. 58 S	. 28	.28	.28	.28	.28	.28	15.	.27	17.	15.	. 27
		December	December 2	December 3	December 4	December 6	December 7	December 8	December o	December 10	December 11	December 13	December 14	December 15	December 16	December 17	December 18	December 20	December 21	December 22	December 23	December 24	December 27	December 28	December 20	December 30	December 31

## PRICES OF STAPLE COTTON YARNS IN THE UNITED STATES ON THE FIRST OF EACH QUARTER DURING YEARS 1911 TO 1920 INCLUSIVE



The above chart is based on the statistics given on the next page. It shows the prices of three staple cotton yarns, in cents per pound, in the United States, on the first of each quarter during the years 1911 to 1920. The bottom curve (heavy solid line) shows the prices of 10s single Southern carded yarn on cones. The middle curve (broken line) shows the prices of 20s two-ply Southern carded yarn on skeins. The top curve (light solid line) shows the prices of 40s two-ply Eastern combed yarn on skeins.

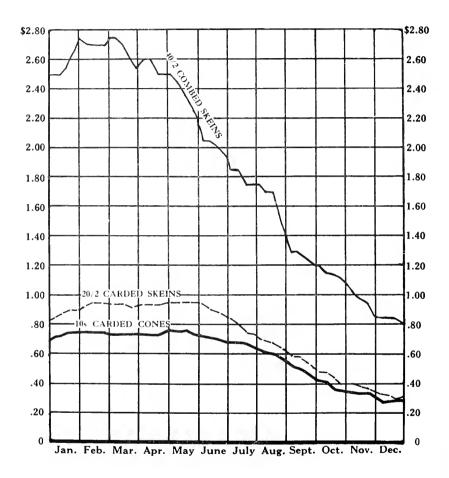
## PRICES OF STAPLE COTTON YARNS IN THE UNITED STATES ON FIRST OF EACH QUARTER DURING YEARS 1911 TO 1920 INCLUSIVE

(The prices given below were taken partly from the New York Journal of Commerce, and partly from the Textile World Journal)

### Prices are Per Pound

	108 Singl	e Southern	20/2 Southern	40/2 East	ern
DATE		rame Cones	Carded Skeins	Combed Sk	
January 1, 1911	 \$0.22	to .22½	\$0.24 <sup>1</sup> / <sub>2</sub> to .24 <sup>3</sup> / <sub>4</sub>	\$0.47 to	.472
April 1, 1911	.2I	to .21½	.23 to .23 $\frac{1}{2}$	.46 to	.46
July 1, 1911	 .21	to .21½	$.22\frac{1}{2}$ to $.23$	.45 to	·45 2
	 .18	to .18½	$.20\frac{1}{2} \text{ to } .21$	.42 to	.422
	 .16	to .16 $\frac{1}{2}$	$.18\frac{1}{2}$ to $.18\frac{3}{4}$	.40 to	.40
April 1, 1912	.18	to .18½	$.21\frac{1}{2}$ to $.22$	.42 to	.42
July 1, 1912	.18	to .18 $\frac{1}{2}$	$.21\frac{1}{2}$ to $.22$	.43 to	-43
October 1, 1912	 .20	to .20 $\frac{1}{2}$	.22 to .22 $\frac{1}{2}$	.46 to	$46\frac{1}{2}$
January 1, 1913	 .22	to .22½	.24 to .24 $\frac{1}{2}$	.48 to	.48
April 1, 1913	 .2I	to .21½	$.23\frac{1}{2}$ to $.24$	.48 to	$.48\frac{1}{2}$
July 1, 1913	 .2 I	to .21½	.22 to .22 $\frac{1}{2}$	.47 to	$\cdot 47\frac{1}{2}$
October 1, 1913	.22	to .22½	.25 to .25 $\frac{1}{2}$	.43 to	.432
January 1, 1914	-	to .21 \frac{3}{4}	.23 to .23 $\frac{1}{2}$	.42 to	$-42\frac{1}{2}$
April 1, 1914	. 2 τ	to .21 ½	.23 to .23½	.42½ to	.43
July 1, 1914	.2I	to .21½	.22 to .22 $\frac{1}{2}$	.42 $\frac{1}{2}$ to	.43
October 1, 1914	 .15	to .17½	.17 to .18	$.38\frac{1}{2}$ to	.39
	 .14	to .15	.16 $\frac{1}{2}$ to .17 $\frac{1}{2}$	.37 to	$-37\frac{1}{2}$
April 1, 1915	.15	to .16½	$.16\frac{1}{2}$ to .18	.38 to	.381
July 1, 1915	. I 5½	to .17½	.17 to .19	.40 to	.40
October 1, 1915	 .18	to .19	.21 to .22	.41½ to	.42
January 1, 1916	 ,20	to .22	.25 to .27	$.45\frac{1}{2}$ to	.48
April 1, 1916	 .20	to .22	.26 to .27	.48 to	.50
July 1, 1916	 .231	to .24	.28 to .31	.53 to	-55
October 1, 1916	 .29	to .31	$.33\frac{1}{2}$ to $.35$	.oo to	$.63\frac{1}{2}$
January 1, 1917	 .35	to .37	.30 to .41	.85 to	.00
April 1, 1917	 .34	to .36	.36½ to .38	.71 to	.76
July 1, 1917	 -44	to .46	.43 to .46	.88 to	.91
	 .41	to .42	.42 to .45	.80 to	.85
	 .50	to .52	.55 to .58	$.89\frac{1}{2}$ to	.92
April 1, 1918	.60	to .61	.67 to .68	$.94^{\frac{1}{2}}$ to	.97
July 1, 1918	.61	to .63	.71 to .73	1.18 to 1	1.19
October 1, 1918	.61	to .63	.73 to .75	1.24	
January 1, 1919	 .50	to .53	.62 to .65	1.24	
April 1, 1919	 .41	to .43	.46 to .50	.85 to	.95
July 1, 1919	 .55	to .57	.67 to .69	1.15 to 1	1.25
October 1, 1919	 .60	to .63	.70 to .72½	1.45 to 1	1.50
January 1, 1920	 .69	to .73	.84 to .85	2.50 to	
April 1, 1920	.74	to .77	.90 to .92	2.60 to	
July 1, 1920	 .70	to .75	.80 to .85	1.85 to	
October 1, 1920	 .42	to .45	.50 to .55	1.20 to	
January 1, 1921	.28	to .20	.31 to .32	.82 to	

## PRICES OF STAPLE COTTON YARNS IN THE UNITED STATES DURING THE YEAR 1920



The above chart is based on the statistics given on the next page. It shows the movement of prices of three staple cotton yarns, in cents per pound, in the United States, from week to week during 1920. The bottom curve (heavy solid line) shows the prices of 10s single Southern carded yarn on cones. The middle curve (broken line) shows the prices of 20s two-ply Southern carded yarn on skeins. The top curve (light solid line) shows the prices of 40s two-ply Eastern combed yarn on skeins.

## PRICES OF STAPLE COTTON YARNS IN THE UNITED STATES WEEK BY WEEK DURING THE YEAR 1920

(The prices given below were taken partly from the New York  $formet \neq \phi$  Commerce and partly from the monthly reports of Frederick B. Macy & Co., of New Bedford)

### Prices are Per Pound

		Thees are rer	i victiful	
DATE		ros Single Southern Carded Frame Cones	20 2 Southern Carded Skeins	10-2 Eastern Combed Skeins
January	I	\$0.00 to \$0.70	80.82 to 80.84	\$2.50 to
	5	.71 to .72	.85 to	2.50 to
	12	.73 to	.87 to	2.50 to
	10	.75 to	.00 to	2.55 to
	20	.75 to	.00 10	2.05 to
February	2	.75 to	.00 to .03	2.75 to
	()	.75 to	.03 to .05	2.70 to
	10	.75 to	.03 to .05	2.70 to
	24	.75 to	.03 to .05	2.70 to
March	I	.73 to .74	.03 to .05	2.75 to
	8	.73 to .74	.03 to .05	2.75 to
	15	.73 to .74	.03 to .05	2.70 to
	22	.73 to .74	.00 to .03	2.00 to
	20	.74 to	.93 to	2.55 to
April	5	.74 to	.03 to .05	2.60 to
	12	.74 to	.03 to .05	2.60 to
	IQ	.74 to	.93 to .95	2.50 to
	20	.76 to	.05 to	2.50 to
May	3	.76 to	.95 to	2.50 to
	10	.76 to	.05 to	2.45 to
	17	.76 to	.05 to	2.35 to
	24	.74 to	.05 to	2.25 to
June	I	.74 to	.05 to	2,20 to
	7	.72 to .74	.93 to .95	2.05 to
	14	.72 to	.00 to	2.05 to
	21	.70 to .71	.88 to .00	2.00 to
	28	.69 to .70	.85 to .88	1.05 to
July	6	.68 to	.83 to .85	1.85 to
	12	.68 to	.8c to	1.85 to
	19	.68 to	.75 to	1.75 to
	26	.65 to	.73 to	1.75 to
August	2	.63 to	.70 to	1.75 to
	9	.61 to .62	.68 to .70	1.70 to
	16	.61 to	.07 to	1.70 to
	23	.57 to	.65 to	1.50 to
Cantamil	30	.55 to	.03 to	1.45 to
Septembe		.52 to	.58 to .60	1.30 to
	1.3	.52 to		1.30 to
	20	.48 to .50	.54 to .55	1.25 to 1.20 to
October	27	1.0	.48 to	1.20 to
October	4	.42 to .45	.48 to	1.15 to
	18	.38 to	.44 to	1.14 to
	25	.35½ to	.40 to	1.12 to
Novembe		.35½ to	.40 to	1.10 to
	8	.35 to	.40 to	1.02 to
	15	.34 to	.38 to	.97 to
	22	.34 to	.37 to	.05 to
	20	.31 to	.35 to	.87 to
Decembe		.28 to	.33 to	.86 to
	13	.20 to	.32 to	.86 to
	20	.20 to	.30 to	.85 to
	27	.28 to	.30 to	.S2 to
	31	.28 to .29	.31 to .32	.82 to

## OPENING, HIGH, LOW AND CLOSING PRICES OF COTTON YARN DURING 1920

Per Pound

(Compiled in the New York Market by the New York Journal of Commerce)

SOUTHERN TV	CO-PLV	CHAIN	WARPS	ETC		SO	пти	ERN SI	NGLE SI	KEINS	
SOUTHERN IV				Close		50	0 1 1 1 1	Open	High	Low	Close
C. 1	Open	High	Low		2.46			\$0.92	\$1.05	\$0.32	_
6s to ros	\$0.70	\$0.75	$\$0.26\frac{1}{2}$	$\$0.26\frac{1}{2}$ $0.27$	24S 26S			0.93	1.08	$0.32\frac{1}{2}$	50.32 $0.32\frac{1}{2}$
128 to 148	0.73	0.90	0.27	0.27	30S			1.00	1.25	0.40	0.40
2-ply 16s	0.75 0.85	0.95	0.20	0.20	303						0.40
2-ply 20s	0.05	1.10	0.32	0.32					AME C		
2-ply 24s	1.00	1.12	0.33	0.33	٤s			\$o.68	\$0.75	\$0.25	\$0.25
2-ply 30s	1.12	1.30	0.35	0.35	ICS			0.68	0.76	0.26	0.26
2-ply 40s	1.60	2.25	0.40	0.40	128			0.68	0.77	$0.26\frac{1}{2}$	$0.26\frac{1}{2}$
2-ply 50s	1.00	2.60	0.55	0.55	148			0.71	0.78	0.27	0.27
				55	168 188			0.73	0.79	$0.27\frac{1}{2}$	$0.27\frac{1}{2}$
SOUTHE	RN TW	O-PLY S	KEINS		188 208			0.74 0.75	0.80 0.84	0.28 0.28 <sup>1</sup> / <sub>2</sub>	0.28 0.28 $\frac{1}{2}$
6s to 10s	\$0.65	\$0.73	\$0.26	\$0.26	228			0.76	0.85	0.281	$0.28\frac{1}{2}$
10s to 12s	0.70	0.78	0.27	0.27	248			0.83	0.02	0.202	0.202
1.4S	0.72	0.88	$0.27\frac{1}{2}$	$0.27\frac{1}{2}$	26s			0.84	0.93	0.31	0.31
16s	0.75	0.90	0.28	0.28	30S			$0.07\frac{1}{2}$	1.10	0.30	0.30
20S	0.83	0.05	0.28	0.28	30s e			$0.97\frac{1}{2}$	1.08	0.34	0.34
24S	0.95	1.08	0.31	0.31	305 0					-	
26s	0.07	1.12	$0.32\frac{1}{2}$	$0.32\frac{1}{2}$					_	ER CONI	_
30s	1.08	1.30	0.35	0.35	ICS			\$1.12	\$1.16	\$0.50	\$0.50
40S	1.50	2.25	0.40	0.10	I 2S			1.13	1.17	$0.50\frac{1}{2}$	$0.50\frac{1}{2}$
50s	1.75	2.75	0.54	0.54	148			1.14	1.18	0.51	0.51
6cs	1.85	2.80	0.66	0.66	18s			1.18	1.20	0.52	0.52
HPI	HOLSTE	RY YAR	NS		2CS			1.20	1.22	0.55	0.55
				0	22S			1.22	1.24	0.56	0.56
8s, 3 & 4-ply .	\$0.03	\$0.65	\$0.20	\$0.20	248			1.26	1.30	0.58	0.58
	DUCK	YARNS			26s 28s			1.30	1.32	0.60 0.62	0.60 0.62
3, 4 & 5-ply								1.50	1.54		0.65
skeins-					3CS			1.54 1.58	1.58	0.65 0.70	0.70
8s	\$0.66	\$0.74	$so.26\frac{1}{2}$	$\$0.26\frac{1}{2}$	328			1.88	1.88	0.75	0.75
IOS	0.72	0.78	0.27 1/2	$0.27\frac{1}{2}$	348 368			1.02	1.02	0.75	0.80
12S	0.73	0.79	$0.28\frac{1}{2}$	$0.28\frac{1}{2}$	4CS			2.00	2.20	0.83	0.83
16s	0.76	0.00	$0.28\frac{1}{2}$	$0.28\frac{1}{2}$					2.20		
20S	0.86				508			2 7 7	2 75	0.00	0.00
		0.98	0.30	0.30	5CS			2.75	2.75	0.90	0.90
COUTIED				0.30	6cs	  CERN CA	  RDF	3.10	3.10	00.1	1.00
SOUTHERN	N SINGI	LE CHAI	IN WARI	0.30 PS	6cs EAST	TERN CA	RDE	3.10 D PEEL	3.10 ER SKEI	1.00 INS AND	1.00 WARPS
6s to 12s	N SINGI \$0.71	LE CHAI \$0.76	IN WARI \$0,26\frac{1}{2}	0.30 PS \$0.26\frac{1}{2}	6cs EAST 2-ply	TERN CA	RDE	3.10 D PEEL \$1.08	3.10 ER SKEI \$1.30	1.00 INS AND \$0.33	1.00 WARPS \$0.33
6s to 12s	\$0.71 0.74	\$0.76 0.82	IN WARI \$0.26\frac{1}{2} 0.27	0.30 PS \$0.26\frac{1}{2} 0.27	6cs EAST 2-ply 2-ply	TERN CA y 208 . y 228 .	RDE	3.10 D PEEL \$1.08 1.10	3.10 ER SKEI \$1.30 1.32	1.00 INS AND \$0.33 0.35	1.00 WARPS \$0.33 0.35
6s to 12s	\$0.71 \$0.74 0.75	\$0.76 0.82 0.85	\$0.26\frac{1}{2}\$ 0.27\$ 0.27\frac{1}{2}\$	0.30 PS \$0.26\frac{1}{2} 0.27 0.27\frac{1}{2}	6cs EAST 2-ply 2-ply 2-ply	TERN CA 7 208 . 7 228 . 7 248 .	RDE	3.10 D PEEL \$1.08 1.10	3.10 ER SKEI \$1.30 1.32 1.35	1.00 INS AND \$0.33 0.35 0.38	1.00 WARPS \$0.33 0.35 0.38
6s to 12s	\$0.71 0.74 0.75 0.85	\$0.76 0.82 0.85 0.93	IN WARE $0.26\frac{1}{2}$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$	0.30 S0.26½ 0.27 0.27½ 0.28½	6cs EAST 2-ply 2-ply 2-ply 2-ply	TERN CA v 208 . v 228 . v 248 . v 268 .	RDE	3.10 D PEEL \$1.08 1.10 1.13 1.18	3.10 ER SKEI \$1.30 1.32 1.35 1.40	1.00 INS AND \$0.33 0.35 0.38 0.40	1.00 WARPS \$0.33 0.35 0.38 0.40
6s to 12s	\$0.71 0.74 0.75 0.85 0.85	\$0.76 0.82 0.85 0.93 0.96	IN WARF $\$0.26\frac{1}{2}$ $0.27$ $0.27\frac{1}{2}$ $0.28\frac{1}{2}$ $0.29\frac{1}{2}$	0.30 \$0.26 $\frac{1}{2}$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$	6cs EAST 2-ply 2-ply 2-ply 2-ply 2-ply	TERN CA y 20s . y 22s . y 24s . y 26s . y 30s .	RDE	3.10 D PEEL \$1.08 1.10 1.13 1.18	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52	1.00 INS AND \$0.33 0.35 0.38 0.40 0.41	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41
6s to 12s	\$0.71 0.74 0.75 0.85 0.85	\$0.76 0.82 0.85 0.93 0.96 1.08	IN WARI $$0.26\frac{1}{2}$$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31	0.30 \$0.26 $\frac{1}{2}$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31	6CS EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply	TERN CA v 208 . v 228 . v 248 . v 268 . v 308 . v 408 .	RDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25	1.00 INS AND \$0.33 0.35 0.38 0.40 0.41	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41
6s to 12s	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93	\$0.76 0.82 0.85 0.93 0.96 1.08	(N WARI \$0.26 $\frac{1}{2}$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31 0.33	0.30 PS $\$0.26\frac{1}{2}$ $0.27$ $0.27\frac{1}{2}$ $0.28\frac{1}{2}$ $0.29\frac{1}{2}$ $0.31$ $0.33$	6CS EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply	TERN CA y 208 . y 228 . y 248 . y 208 . y 308 . y 408 . y 458 .	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50	1.00 INS AND \$0.33 0.35 0.38 0.40 0.41 0.51	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41
6s to 12s	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00	\$0.76 0.82 0.85 0.93 0.96 1.08 1.10	(N WARI $\$0.26\frac{1}{2}$ 0.27 $0.27\frac{1}{2}$ $0.28\frac{1}{2}$ $0.29\frac{1}{2}$ 0.31 0.33 0.35	0.30 PS \$0.26\frac{1}{2} 0.27 0.27\frac{1}{2} 0.28\frac{1}{2} 0.29\frac{1}{2} 0.31 0.33 0.35	EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply	TERN CA V 208 . V 228 . V 248 . V 268 . V 308 . V 408 . V 458 . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAB	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50 RDED CO	1.00 INS AND \$0.33 0.35 0.38 0.40 0.41 0.51 0.55	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41 0.51
6s to 12s	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93	\$0.76 0.82 0.85 0.93 0.96 1.08	(N WARI \$0.26 $\frac{1}{2}$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31 0.33	0.30 PS $\$0.26\frac{1}{2}$ $0.27$ $0.27\frac{1}{2}$ $0.28\frac{1}{2}$ $0.29\frac{1}{2}$ $0.31$ $0.33$	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply	TERN CA V 208 . V 228 . V 248 . V 268 . V 308 . V 408 . V 458 . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF \$0.74\frac{1}{2}	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50 RDED CO	1,00 INS AND \$0,33 0,35 0,38 0,40 0,41 0,51 0,55 ONES \$0,31	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41 0.51 0.55
6s to 12s	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40	\$0.76 0.82 0.85 0.93 0.96 1.08 1.10 1.25 2.00	\$0.26\frac{1}{2}\$ 0.27\frac{1}{2}\$ 0.27\frac{1}{2}\$ 0.28\frac{1}{2}\$ 0.29\frac{1}{2}\$ 0.31 0.33 0.35 0.40	0.30 PS \$0.26\frac{1}{2} 0.27 0.27\frac{1}{2} 0.28\frac{1}{2} 0.29\frac{1}{2} 0.31 0.33 0.35	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 108	TERN CA v 208 . v 228 . v 248 . v 268 . v 308 . v 408 . v 458 . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAB \$0.74\frac{1}{2}	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50 RDED CO \$0.81 0.82	1,00 INS AND \$0.33 0.35 0.38 0.40 0.41 0.51 0.55 ONES \$0.31 0.32	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41 0.51 0.55
6s to 12S	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40	\$0.76 0.82 0.85 0.93 0.96 1.08 1.10 1.25 2.00	\$0.26\frac{1}{2}\$ 0.27\frac{1}{2}\$ 0.27\frac{1}{2}\$ 0.28\frac{1}{2}\$ 0.29\frac{1}{2}\$ 0.31 0.33 0.35 0.40  KEINS	0.30 \$0.26\frac{1}{2} 0.27 0.27\frac{1}{2} 0.29\frac{1}{2} 0.31 0.33 0.35 0.40	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 108 128 148	Y 20S	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF \$0.74\frac{1}{2} 0.75\frac{1}{2} 0.76\frac{1}{2}	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50 RDED C \$0.81 0.82 0.84	1.00 INS AND \$0.33 0.35 0.38 0.40 0.41 0.51 0.55 ONES \$0.31 0.32 0.33	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41 0.51 0.55 \$0.31 0.32 0.33
6s to 12s	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40 ERN SI \$0.70	\$0.76 0.82 0.85 0.03 0.96 1.08 1.125 2.00 NGLE \$	\$0.26\frac{1}{2}\$ 0.27\frac{1}{2}\$ 0.28\frac{1}{2}\$ 0.28\frac{1}{2}\$ 0.29\frac{1}{2}\$ 0.31 0.33 0.35 0.40  KEINS \$0.26\frac{1}{2}\$	0.30 PS $\begin{array}{l} \$0.26\frac{1}{2} \\ \$0.26\frac{1}{2} \\ 0.27 \\ 0.28\frac{1}{2} \\ 0.20\frac{1}{2} \\ 0.31 \\ 0.33 \\ 0.35 \\ 0.40 \\ \end{array}$	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 10s 12s 14s 16s	TERN CA v 208 . v 228 . v 248 . v 268 . v 308 . v 408 . v 458 . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF $\frac{1}{2}$ 0.75 $\frac{1}{2}$ 0.76 $\frac{1}{2}$	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.25 RDED CC \$0.81 0.82 0.84 0.85	1.00 INS AND \$0.33 0.35 0.38 0.40 0.41 0.51 0.55 ONES \$0.31 0.32 0.33 0.34	1.00 WARPS \$0.33 0.35 0.38 0.40 0.41 0.55 \$0.31 0.32 0.33 0.34
6s to 12S	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40 ERN SI \$0.70 0.71	\$0.76 0.82 0.85 0.93 0.96 1.08 1.10 1.25 2.00 NGLE \$1	N WARI $\$0.26\frac{1}{2}$ $0.27\frac{1}{2}$ $0.27\frac{1}{2}$ $0.29\frac{1}{2}$ $0.29\frac{1}{2}$ $0.33$ $0.33$ $0.35$ $0.40$ KEINS $\$0.26\frac{1}{2}$ $0.26\frac{1}{2}$	0.30 0.8 \$0.26 $\frac{1}{2}$ 0.27 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.31 0.35 0.40 \$0.26 $\frac{1}{2}$ 0.26 $\frac{1}{2}$	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 10s 12s 14s 16s 20s	Y 20S	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF \$0.74\frac{1}{2} 0.75\frac{1}{2} 0.76\frac{1}{2} 0.76\frac{1}{2} 0.81\frac{1}{2}	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 \$0.81 0.82 0.84 0.85 0.91	1.00 INS AND \$0.33 0.35 0.40 0.41 0.51 0.55 ONES \$0.31 0.32 0.33 0.34 0.36	1.00 WARPS \$0.33 0.35 0.40 0.41 0.51 0.55 \$0.31 0.32 0.33 0.34 0.36
6s to 12S	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40 ERN SI \$0.70 0.71 0.72	\$0.76 0.82 0.85 0.03 0.96 1.08 1.12 2.00 NGLE \$1 \$0.76 0.78 0.80	IN WARI $\$0.26\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31 0.33 0.40 KEINS $\$0.26\frac{1}{2}$ 0.26 $\frac{1}{2}$ 0.26 $\frac{1}{2}$ 0.26 $\frac{1}{2}$ 0.27	0.30 0.8 \$0.26\frac{1}{2}\$ 0.27 \\ 0.27\frac{1}{2}\$ 0.28\frac{1}{2}\$ 0.28\frac{1}{2}\$ 0.31 \\ 0.33\$ 0.35 0.40 \$\$\$ 0.26\frac{1}{2}\$ 0.27 \\ 0.26\frac{1}{2}\$ 0.27	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 10s 12s 14s 16s 20s 22s	FERN CA V 20S . V 22S . V 24S . V 24S . V 30S . V 40S . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF \$0.74\frac{1}{2} 0.75\frac{1}{2} 0.76\frac{1}{2} 0.78 0.81\frac{1}{2}	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50 RDED C \$0.81 0.82 0.84 0.85 0.91	1.00 INS AND \$0.33 0.35 0.38 0.41 0.51 0.55 ONES \$0.31 0.32 0.33 0.34 0.36	1.00 WARPS \$0.33 0.35 0.38 0.41 0.51 0.55 \$0.31 0.32 0.33 0.34 0.36
6s to 12s	SINGI \$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40 ERN SI \$0.70 0.71 0.72 0.73	\$0.76 0.82 0.85 0.03 0.96 1.08 1.12 2.00 NGLE \$1 \$0.76 0.78 0.89	IN WARI $\$0.26\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31 0.33 0.35 0.40 KEINS $\$0.26\frac{1}{2}$ 0.26 $\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.27 $\frac{1}{2}$	0.30 PS $\begin{array}{c} 0.30 \\ \$0.26\frac{1}{2} \\ 0.27 \\ 0.27\frac{1}{2} \\ 0.28\frac{1}{2} \\ 0.31 \\ 0.33 \\ 0.35 \\ 0.40 \\ \\ \end{array}$	ocs EAST 2-ply	FERN CA V 20S . V 22S . V 24S . V 24S . V 26S . V 30S . V 40S . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF \$0.74\frac{1}{2} 0.75\frac{1}{2} 0.75\frac{1}{2} 0.82\frac{1}{2} 0.90	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.25 2.25 CDED C \$0.81 0.82 0.84 0.85 0.91	1.00 INS AND \$0.33 0.35 0.40 0.41 0.51 0.55 ONES \$0.31 0.32 0.33 0.34 0.36	1.00 WARPS \$0.33 0.35 0.40 0.41 0.51 0.55 \$0.31 0.32 0.33 0.34 0.36
6s to 12S	\$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40 ERN SI \$0.70 0.71 0.72 0.73	\$0.76 0.82 0.85 0.03 0.96 1.08 1.10 1.25 2.00 NGLE \$1 \$0.76 0.78 0.83 0.83	IN WARI $\$0.26\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31 0.33 0.35 0.40 KEINS $\$0.26\frac{1}{2}$ 0.26 $\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.28	0.30 \$0.26\frac{1}{2} 0.27 0.27\frac{1}{2} 0.20\frac{1}{2} 0.20\frac{1}{2} 0.33 0.35 0.40 \$0.26\frac{1}{2} 0.26\frac{1}{2} 0.27\frac{1}{2} 0.27\frac{1}{2} 0.27\frac{1}{2} 0.28	ocs EAST 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-ply 2-pls 108 128 148 168 208 228 268 288	FERN CA V 20S . V 22S . V 24S . V 24S . V 30S . V 40S . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.30 2.00 2.25 2.74 \$0.74 2.00 0.75 2.00 0.75 0.78 0.81 0.82 0.90 0.93	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.50 RDED C \$0.81 0.82 0.84 0.85 0.01	1.00 INS AND \$0.33 0.35 0.40 0.41 0.51 0.55 ONES \$0.31 0.32 0.33 0.34 0.36 0.37	1.00 WARPS \$0.33 0.35 0.40 0.41 0.51 0.55 \$0.31 0.32 0.33 0.34 0.36 0.37
6s to 12s	SINGI \$0.71 0.74 0.75 0.85 0.85 0.92 0.93 1.00 1.40 ERN SI \$0.70 0.71 0.72 0.73	\$0.76 0.82 0.85 0.03 0.96 1.08 1.12 2.00 NGLE \$1 \$0.76 0.78 0.89	IN WARI $\$0.26\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.28 $\frac{1}{2}$ 0.29 $\frac{1}{2}$ 0.31 0.33 0.35 0.40 KEINS $\$0.26\frac{1}{2}$ 0.26 $\frac{1}{2}$ 0.27 $\frac{1}{2}$ 0.27 $\frac{1}{2}$	0.30 PS $\begin{array}{c} 0.30 \\ \$0.26\frac{1}{2} \\ 0.27 \\ 0.27\frac{1}{2} \\ 0.28\frac{1}{2} \\ 0.31 \\ 0.33 \\ 0.35 \\ 0.40 \\ \\ \end{array}$	ocs EAST 2-ply	FERN CA V 20S . V 22S . V 24S . V 24S . V 26S . V 30S . V 40S . EA	ARDE	3.10 D PEEL \$1.08 1.10 1.13 1.18 1.30 2.00 2.25 RN CAF \$0.74\frac{1}{2} 0.75\frac{1}{2} 0.75\frac{1}{2} 0.82\frac{1}{2} 0.90	3.10 ER SKEI \$1.30 1.32 1.35 1.40 1.52 2.25 2.25 2.25 CDED C \$0.81 0.82 0.84 0.85 0.91	1.00 INS AND \$0.33 0.35 0.40 0.41 0.51 0.55 ONES \$0.31 0.32 0.33 0.34 0.36	1.00 WARPS \$0.33 0.35 0.40 0.41 0.51 0.55 \$0.31 0.32 0.33 0.34 0.36

## RELATIVE WHOLESALE PRICES OF COTTON YARN AND COTTON FABRICS, IN COMPARISON WITH OTHER GROUP OF SCOMMODITIES, QUARTER BY QUARTER, FROM 1914 TO 1921

Prices of 1013, Represented by 100, Taken as Basis (Compiled by United States Bureau of Labor Statistics)

	Cotton Yarn 10 I Carded	Pepper- ell Brown Sheet- ings	Lons- dale Bl'ch'd Muslins	Farm Prod- ucts	Food, etc.	Fuel & Light- ing	& Metal	Lumber & Build- ing Ma- terials	cals &	House Fur- nishings	All Com- modities
Aver. of 1913	100	100	100	100	100	100	100	100	100	100	100
January, 1914	99.4	102.3	106.2	101	102	99	92	98	100	99	100
April, 1914	99.4	98.9	103.2	103	95	98	OI	99	100	99	98
July, 1914	97.3	95.9	103.7	101	104	95	85	97	99	99	100
October, 1914	76.8	88.7	103.2	103	107	93	83	96	105	99	99
January, 1915	74.6	78.4	85.0	102	106	93	83	04	103	99	99
April, 1915	74.6	81.9	91.0	107	105	89	01	04	102	99	100
July, 1915	72.4	82.2	91.5	108	105	90	102	93	108	99	$I \bigcirc I$
October, 1915	88.1	85.3	91.0	105	101	96	100	93	I 24	99	102
January, 1916	94.9	95.5	97.1	108	114	105	126	99	150	105	111
April, 1916	101.7	102.3	103.2	114	118	108	147	102	172	108	117
July, 1916	114.5	106.8	107.3	118	I 22	108	145	99	156	I 2 I	120
October, 1916	135.6	133.0	121.4	136	141	133	151	IOI	150	I 24	134
January, 1917	153.6	150.1	133.5	148	151	176	183	106	159	132	151
April, 1917	162.7	163.7	136.5	181	183	184	208	114	170	139	173
July, 1917	203.6	191.8	195.1	199	182	192	257	132	198	152	187
October, 1917	189.8	197.8	206.3	208	184	146	182	134	252	152	181
January, 1918	242.5	234.2	219.5	207	188	157	174	136	232	161	185
April, 1918	278.7	3288	280.5	217	1 So	157	177	146	229	172	190
July, 1918	289.6	-	304.9	224	186	166	184	154	216	199	198
October, 1918	276.0	-	304.9	224	202	167	187	158	218	226	205
January, 1919	201.4	261.6	254.9	222	209	170	172	161	101	218	203
April, 1919	188.7	205.5	214.6	235	212	167	152	162	178	217	203
July, 1919	267.4	300.0	334.1	246	218	171	158	186	171	245	219
October, 1919	276.5	313.7	358.5	230	2 I 2	181	161	231	174	264	230
January, 1920	328.6	389.1	399.9	246	253	184	177	268	189	324	248
April, 1920	351.7	-	412.4	246	270	213	105	341	2 I 2	331	265
July, 1920	316.7	_	412.4	236	268	252	191	333	217	362	262
October, 1920	196.3	274.2	296.2	182	204	282	184	313	216	371	225
January, 1921	130.1	165.6	190.7	136	162	228	152	239	182	283	177

## ACTUAL PRICES OF COTTON, IN COMPARISON WITH OTHER BASIC RAW MATERIALS, QUARTER BY QUARTER, FROM 1914 TO 1921

(Compiled by United States Bureau of Labor Statistics)

		Cotton Middling Upland, Per lb.	Wool $ \begin{array}{l} \text{Wool} \\ \frac{1}{4} - \frac{5}{5} \text{ Grades} \\ \text{Scoured,} \\ \text{Per lb.} \end{array} $	Wheat No. 1 Northern, Per bu.	Corn No. 2 Mixed, Per bu	Cattle Good to Choice Steers, Per 100 lbs.	Copper Electro- lytic, Per lb.	Iron Bessemer Pig, Per 2,240 lbs.	Coal Bitu- minous, Per 2.000 lbs.
Average o	f 1913	\$0.128	\$0.471	\$0.874	\$0.025	\$8.507	\$0.157	\$17.133	\$2,200
January,	1014	.127	.417	.876	.614	8.757	.140	14.060	2.200
$\Lambda pril,$	1914	.132	.417	.012	.668	8.713	.144	14.900	2.200
July,	1014	.131	.444	.897	.710	().2I()	.134	14.900	2.200
October,	1014	-	.458	1.103	.732	0.431	.117	14.840	2.200
January,	1915	.083	.514	1.353	.719	8.533	.130	14.500	2.200
April,	1915	.103	.557	1.541	-749	8.031	.150	14.550	2.200
July,	1015	.092	.557	1.300	.783	0.213	.100	14.050	2.200
October,	1915	.125	.000	1.012	.0.35	8.876	.180	10.050	2.200
January,	1016	.124	.043	1.280	.761	8.666	.229	21.580	2.200
April,	1916	.121	.686	1.217	.700	9.119	.269	21.950	2.200
July,	1016	.130	.686	1.170	.808	9.985	.265	21.950	2.200
October,	1916	.181	.686	1.757	.955	9.905	.285	24.080	3.750
January,	1917	.176	.872	1.017	.081	10.531	.295	35.950	4.500
April,	1017	.208	I.000	2.382	1.307	12.310	.340	42.200	5.000
July,	1917	.261	1.200	2.582	2.044	12.560	.318	57.450	5.000
October,	1917	.281	1.382	2.170	1.968	14.675	.235	37.250	3.300
January,	1918	.324	1.455	2.170	1.775	13.113	.235	37.250	3.600
April,	1918	.317	1.455	2.170	1.065	15.175	.235	36.150	3.600
July,	1918	.312	1.437	2.170	1.665	17.625	.255	36.600	4.100
October,	1918	.325	1.437	2,210	1.385	17.850	.200	36.600	4.100
January,	1919	.296	1.200	2.223	1.401	18.413	.204	33.600	4.100
April,	1910	.290	1.001	2.580	1.609	18.325	.153	29.350	4.000
July,	1010	-351	1.236	2.680	1.020	16.869	.215	29.350	4.000
October,	1919	∙355	1.236	2.625	1.400	17.594	.217	29.350	4.500
January,	1020	-393	1.230	2.931	1.503	15.038	.103	40.400	4.100
April,	1020	.424	1.200	3.000	1.700	13.900	.102	43.650	5.500
July,	1020	.410	.000	2.831	1.540	15.381	.190	47.150	0.000
October,	1020	.226	-727	2.100	.888	14.688	.168	40.210	7.100
January,	1021	.167	.540	1.788	.682	0.840	.120	33.960	5.600

## RELATIVE PRICES OF COTTON, IN COMPARISON WITH OTHER BASIC RAW MATERIALS, QUARTER BY QUARTER, FROM 1914 TO 1921

Prices of 1913, Represented by 100, Taken as Basis

(Compiled by United States Bureau of Labor Statistics)

		Cotton Middling Upland	Wool 4-3 Grades Scoured	Wheat No. 1 Northern	Corn No. 2 Mixed	Cattle Good to Choice Steers	Copper Electro- lytic	Iron Bessemer Pig	Coal Bitu- minous
Average o	of 1913	100.0	0.001	100.0	00.0	100.0	0.001	100.0	100.0
January,	1014	99.3	88.5	100.3	08.2	102.9	94.6	87.3	100.0
April,	1014	103.0	88.5	104.4	106.8	102.4	01.4	87.0	100.0
July,	1014	102.3	94.3	102.0	113.6	108.4	85.4	87.0	100.0
October,	1014		07.3	120.2	117.0	I I O. ()	74.4	86.6	100.0
January,	1015	64.7	100.2	154.0	114.0	100.3	82.6	85.2	100.6
April,	1015	80.5	118.3	176.4	0.011	94.4	0.101	84.9	100.0
July,	1015	71.9	118.3	150.0	125.3	108.3	126.8	87.3	100.0
October,	1915	97.7	127.4	115.7	101.6	104.3	114.4	98.9	0.001
January.	1916	97.0	130.5	147.0	121.8	101.0	145.5	120.0	0.00
April,	1916	94.3	145.0	1.303	121.0	107.2	170.0	128.1	0.001
July,	1016	101.6	145.0	133.9	120.3	117.4	108.8	128.1	100.0
October,	1916	141.7	145.0	201.1	152.8	116.4	181.2	140.0	170.5
January,	1017	137.8	182.3	219.4	157.1	123.8	187.5	200.8	204.5
$\Lambda pril,$	1917	159.0	208.8	272.0	223.5	144.7	210.1	246.3	227.3
July,	1017	203.9	254.8	205.4	327.0	147.6	202.5	335 3	227.3
October,	1017	219.9	288.8	248.4	314.8	172.5	140.4	217.4	150.0
January,	1918	253.1	308.0	248.3	284.0	154.1	140.7	217.4	162.7
April,	1918	247.7	308.9	248.3	266.4	178.4	140.7	211.0	162.7
July,	1018	243.8	305.1	248.3	266.4	207.2	102.4	213.6	186.4
October,	1018	253.9	305.1	<sup>2</sup> 53·5	221.6	209.9	105.6	213.6	186.4
January,	1919	231.3	254.8	254.3	224.2	216.4	120.0	196.1	186.4
April,	1919	226.6	231.6	296.2	257.4	215.4	07.5	171.3	181.8
July,	1010	274.2	262.4	306.6	307.2	198.3	130.0	171.3	181.8
October,	1919	277.3	262.4	300 3	224.0	206.8	138.2	171.3	204.5
January,	1020	307.1	258.4	335.6	240.4	187.3	122.8	2,3,5.8	180.4
April,	1920	331.4	250.0	344.2	27.3.0	103.5	122.0	254.8	250.0
July.	1020	320.6	180.0	324.1	247.8	180.8	120.5	275.2	272.7
October,	1920	176.8	151.0	241.1	142.0	172.7	106.5	287.2	322.7
January,	1921	130.6	118.6	204.7	1.001	115.7	81.0	198.2	254.5

## PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920

(Compiled by C. H. Pope & Company)

## PRICES ROSE IN JANUARY

The year opened with prices very firm. Gray goods advanced promptly soon after business was resumed and were bought liberally in the ten days of the year. Steady buying continued for a time but a break in Wall Street and some other most line foctors consent bacteries. first ten days of the year.

urst ten days of the year. So and a slight weakening. In th Many contracts were made du were more active, and the auto	Steady buying continued for a time, but a break in Mail fin the last week of the month weakness disappeared and but e during the month calling for deliveries to the early fall, an automobile trades bought liberally.	ying contineek of the month cal trades bou	ontinued for a time, if the month weakness a calling for deliveries bought liberally.	r a time, b weakness o r deliveries erally.	e, but ess disa ries to	but a break disappeared s to the early	reak in W. eared and early fall,	all Stree buying , and in	of Se	w o <del></del>	e other ur character, tances to	settlin but in the end	some other unsettling factors cau oad character, but in small lots v linstances to the end of the year.	ors caus lots w e year.	s caused hesitation lots was persistent. year. Fine goods	itation istent. goods
	og x t9	.sby 00.9 ,fani-72 ,sby 00.8	,84 x 60 ,485 ,485 ,25 yds,	38½-inch, 5.35 yds.	39-inch,   39-inch,   4.75 yds.	36-inch, 1.25 yds.	80 x 80, 30-inch, 4.00 yds,	80 x 88, 39-inch, 5.00 yds,	48 x 48, 36-inch, 4.00 yds.	48 x 48, 31-inch, 5.00 yds.	36-inch, 36-inch, 5-50 yds,	76 x 72, 40-inch, 9.00 yds.	40-inch,	96 x 100, 40-inch, 7.00 yds.	,08 x 88 ,30-inch ,25 yds.	Cotton, Spot, X.Y.
anuary 2	I. 1	1.3	183	211	25.1	$20^{\frac{1}{4}}$	22	3.7	23	181	101		9	1	7.0	20.02
fanuary 3	1111	13	10	$21\frac{1}{2}$	25.5	264	3.2	37		I S I	101	23.1	0	) [  -  -	1 (1	30.25
anuary 5 · · · · ·	141	13	10	$2 I \frac{1}{2}$	252	201	32	37	23	181	$10^{\frac{1}{2}}$	332	9	+	271	30.25
	141	$13\frac{1}{4}$	10	$\frac{21\frac{1}{2}}{2}$	252	202	3.2	374	23	181	103	332	0+	1/	271	39.25
anuary 7 · · · · · ·	1+1	134	101	213	50	27	32	374	23	183	103	334	101	+7,1	27.2	30.00
	14 T	134	0,7	2.2	26	1/1	324	37.3	23.2	1821	163	34	107	473	28	30.25
. !	+ T	134	20	22.2	26	27.2	322	372	23 4	× ×	17	$34\frac{1}{2}$	1+	<del>\$</del>	283	30.25
January 10	142	134	20	224	36	272	322	372	7,	18,	1 1 2	35	7	<del>\$</del>	28.3 1	30.25
January 12	I + 2	134	20.	23	202	28	324	38	÷+5	61	171	352	+I 5	×+	283	39.25
January 13	15	132	202	23	204	SS .	33	38	24.5	10	172	30	7	+S <sub>2</sub>	20	39.25
January 14	15	132	2.1	23	27	2.5.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	33	38	- <del>2</del> + <del>2</del> = <del>2</del>	10	173	$30\frac{1}{1}$	+3	10	203	30.25
January 15	15	+1	2.1	23	27	150 150 150 150 150 150 150 150 150 150	33,	38	243	10	173	303	~1	101	30	39.25
anuary 10	154	† <sub>1</sub>	212	231	27	282	332	38	25	10	SI	37	7	50	30	30.25
andary 17		+1	2.2	23.2	27	28 <u>2</u>	332	382	254	10	1.8	37	~ +	20	30	39.25
	152	++1	2.2	232	27	20	332	30	25.2	10	1.8	37	7	20	30	39.75
	152		7.5	23 2	2.2	29	332	30	25.4	10	SI	37	+5	20	30	39.55
	152		5.5	232	27	20,	332	30	56	10	SI	37	~	20	30	38.75
anuary 22	152		212	232	201	282	33	30	50	10	181	3.7	7	20	30	39.10
lanuary 23 · · · · · ·	152		212	23	201	283	33	30	50	01	181	37	77	20	30	30.30
anuary 24 · · · · · · ·	152		. 7 I	2 2 2 4 5	50	28	33	30	5()	10	$1S_{\frac{1}{4}}^{1}$	37	~	50	30	39.25
January 20			200	222	25.2	272	3.3	30	5()	10	es.	37	7	20	30	39.15
January 27	152		205	222	254	272	33	39	50	61	173	37	+	50	30	30.05
anuary 25			202	22.2	50	272	33,	30	2()	10	173	37	75	0	30	30.50
andary 29 · · · · · ·	152		21	23	50	272	322	39	50	10	173	37	7+	20	30	30.50
anuary 30	152		212	232	202	27.5	322	30	50	19	IS	37	7	20	30	39.50
January 31	152		2.2	232	202	272	322	39	50	10	18	37	+3	20	30	30.00

(Compiled by C. H. Pope & Company)

## SIGNS OF HESTTATION IN FEBRUARY

Pebruary was a very quiet month in the markets. Signs of hesitation in the cutting trade were very numerous, and there was a sharp fallthe top prices named by mills, and most producers reported a sold up condition into October as a consequence of active buying. The fall trade on domets was also closed up to the full satisfaction of mills. The yarn markets began to hesitate in the last week of the month and mills began ing off in the high prices asked for gray lining fabrics, such as sacens and twills. The jobbers booked full orders on dress ginghams for fall at asking for bids. Western and Southern jobbers reported a very active distribution all through the month and the financial disturbances accompanying higher bank rates gave them little concern.

	Cotton, Spot, XX.	30.15	38.60	37.55	37.80	37.80	38.00	38.00	37.75	37-75	38.45	38-75	38.05	30.40	30.00	3 ).20	3.1.00	*	30.35	40.10	30.85	30.05	40.00
	88 x 80, 30-inch, 11.35 yds.	30	302	301	30	30	30	30	30	30	30	30	30	20	20	20	20	20	2.0	25.2		285	28
	2.00 yds. 40-inch, 96 x 100,	51	25	523	100	523	522	52.5	322	-25	525	5.2	25	51	505	20	000	20	20	20	015	20	20
	,68 x 88, ,40-inch, 8,50 yds.	7	41	† I	1+	<del>-</del>	1+	10-	0+	0+	0+	0+	0+	30	30	30	30	3:0	39	30	383	5.52	382
	,27 x 72, 40-inch. 9.00 yds.	.37	37	37	37	37	37	3.7	37	37	302	30	30	30	30	30	30	30	30	30	30	30	30
	2.50 yds. 36-inch, 48 x 40,	SI	S	17.1	I 7 3	173	173	173	172	172	171	171	1 / 1	17.1	171	171	I 7 1	17.1	17	7.1	7.1	7.1	17
	,48 x 48, 31-inch, 5.00 yds.	$10\frac{1}{2}$	$10^{\frac{1}{2}}$	20	20	20	0,7	50	20	20	30	20	20	103	IO 2	103	103	101	103	103	103	103	103
	48 x 48, 30-inch, 4.00 yds.	201	201	$20\frac{1}{2}$	202	202	2012	203	203	2()1	201	5()	20	12.0	22.	25.2	16,	23	5	10	75	5	25
	80 z 88, 39-inch, 5.00 yds.	0+	0	0+	0	0†	0	0+	0	+0	0+	0	0	302	39	30	30	30	3.)	30)	3)	30	30
	80 z 80, 30-inch, 4.00 yds.	3.21	3.22	321	3.2	32	312	3.1	31	31	311	312	312	31	305	305	303	302	30	30	30	30	30
	4.25 yds 4.25 yds 72 x 76,	272	$27\frac{1}{2}$	27	203	203	202	201	50	20	204	20.2	202	203	201	201	201	303	202	202	5()	30	50
	68 z 72, 39-inch, 4-75 yds.	20	25.23	25.4	252	252	50	15	25	25	244	5+3	24.1	242	7:	7.4	†-	7.7	7.7	24	233	232	232
	64 z 60, 384-inch, 5.35 yds.	23	23	222	221	2.2	2.2	2.2	2.2	2.2	223	22.2	2,3	23	2,3	23	2.3	23	2.2.1	22.2	222	222	222
	60 x 48, 38½-inch, 6.25 yds.	2.2	212	2.1	2.1	2.1	202	202	20.5	202	202	202	201	202	200	20.	20.	7.7	2.1	2.1	202	205	202
	,58 x 58 ,40 oo.9 ,000 yds.	14.3	1+2	142	1+2	1+3	1 1 2	142	1+2	1+1	1,4	†	1,1	1,4	†1	+1	†1	† <sub>1</sub>	1,4	+1	†1	ŤΙ	+-
_	,00 x +0 .21-inch. .20 yds.	151	152	152	15.	152	152	152	122	152	152	152	152	152	152	151	154	154	151	154	152	152	152
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		Februa	February	February	February	February	February	February	February	February	February	February	February	February	February	February	rebrug	February	February	February	February	February	February

\* Exchange closed

(Compiled by C. H. Pope & Company)

## MARCH A MONTH OF RISING PRICES

March as a whole proved to be a month of rising prices for gray cloths. Sales were not very large in volume, but the scarcity of spot goods was great. To some extent it was due to the greatly disorganized transportation conditions arising from storms and railroad embargoes, and later in the month a strike at the port of New York affecting all coastwise deliveries. The prices finally attained were the highest reached since Civil War days, and at the close it was the general view of the trade that still higher values would come if there were no financial disturbance.

Speculation was cut off by the su known to be buying for resule.	sustained high money rates and the refusal of many houses to	high m	oney r	tes an	d the	efusal	of mar	y hous	es to g	go on gi	giving g	goods and	-	credit to those who were	se who	Were
	64 x 60, 7,60 yds.	58 x 82, 450i-75 500 yds.	.84 z oo ,881-inch, ,6.25 y ds.	.25 y 26.5 .25 y 26.5	39-inch, 4-75 yds, 4-75 yds,	39-inch, 4-25 yds. 4-25 yds.	80 x 80, 39-inch, 4.00 yds.	80 x 88, 30-inch, 5.00 yds.	48 x 48, 36-inch, 4.00 yds.	48 x 48, 31-inch, 5.00 yds.	36-inch, 5.50 yds.	76 x 72, 40-inch, 9.00 yds.	40-inch, 40-inch, 8.50 yds.	,001 x 000 ,40-inch, 7,00 yds.	30-inch, 30-inch, 11.35 yds.	Cotton, Spot, X.Y.
										-	r					
March I	ic.	+	000	222	-3.5. -3.5.	5()	30	30	i.c	103	, , , 	100	383	05.	282 282	40.25
March 2	12.	<u>+</u>	202	22.2	23.1	5()	20	30	5	01	103	35	 	0,50	282	40.50
March 3	10	†	202	22.2	23.1	30	20	3.5	1 1 1 1 1 1 1	10	101	100	 	0	28	10.75
	10	7	20.3	222	2,3	5()	20	383	-	[0]	101	35.	38	20	S.	10.05
March 5	15	†	20,	22.1	23	5()	20	200	7.7	10	[ C.	35.	38	0+	250	10.00
	15		20.2	222	23	50	20	38. 28. 29.	7.7	10	101	35	38	181	28	40.00
March 8	75	<del>+</del>	202	223	2.3	201	20	ž.	7.7	182	101	55	38	181	28	10.00
March 9	10	+	2.1	2.3	23.1	1,1	30	SS.	17		101	352	35	0+	28	40.75
March 10	<u></u>	+	215	2,3	23.2	27	31	SS.	7:	0.1	(01	30	381	0+	282	co.1‡
March II	5	†	-1- -1-	23	7.7	100	31	S.	7.7	10	101	30	38 <u>1</u>	0+	282	co.1+
March 12	151	- <del>-</del> -	C - C	23.2	242	258	31	S.	+:	10	, <del>1</del>	30	38.2 28.2	10	28 <u>1</u>	CO.1+
March 13	120	-:	5.5	23.5	10	25	31	38	77	10	; + C -	30	382	10	20	co.1+
March 15	15.	157	Ç.1	23.1	- 01 - 01	S.	31	×.	- 27	0.1	1.	30	38.	÷	20	41.00
March 16	10	- 27	Ç1	23.2	10	200	3.	25	11:1	10		30	30	0+	20	41.00
March 17	125	-27	5.5	23.2	25.2	×.	3.1	3.5	24.5	10	1 7	30	30	6+	20	00.14
March 18	15.	- 2+	2.2	23.2	100	S:	31	~. ~.	- : i -	10	17.	30	30	10	20	41.00
March 19	10	- <u></u>	C1	7.7	10	255	31	 	100	10	1/1	30	30	÷.	2.0	41.00
March 20	10	-27	22	+-	200	25.	31	22.	+	0,	1/	30	39	405	20	41.25
March 22	10	- - -	222	- <del>1</del> -1-	50	×.	312	.c.	- 67 - C	10	171	30	30	20	202	42.00
March 23	10	; <del>-</del> -	23	<del>-</del>	5()	S	315	200	- c1	101	1/1	30	30	20	20.2	43.25
March 24	25	142	23	7	50	200	313	300	- 27 - 17 - 27	501	1/	30	30	20	203	42.00
March 25	15.	-27	23	100	5()		3.2	300	7	2	173	30	30	20	203	41.50
March 26	2.	+	23	242	20	20	32	385	2 + 2	101	2/1	30	30	50	202	41.50
March 27	15.		23	24.5	50	20	32.2	.x.	242	101	1 ~ ·	30	30	20	202	41.50
	QI	1++1	23	242	20	202	322	 	-7-	101	2	30	302	20	30	41.50
March 30	10	15	23	25	20	30	33	35.5	- <del>1</del> -	101	~ ·	30	0+	20	30	41.50
March 31	91	1.5	23	52	26	30	3.3	35.	242	101	~i	30	0+	30	30	41.75

(Compiled by C. H. Pepe & Company)

## TOP WAS REACHED IN APRIL

pressure here, and an unmistakable growth in popular protests against high clothing prices throughout the country. But the cagerness of buyers In April a rise continued steadily until the last week when soft spots began to show following financial troubles in Japan, continued bank to put down orders when printers granted protection, followed later on by a firm opening in the carpet and rug markets, news of various lines being sold up and withdrawn for the fall season, gave cloth buyers courage and several contracts for gray goors were made to carry through September. The bag trade also came forward and made large purchases, and further evidences appeared of a need for goods in the automobile

Cotton,	1	C / *	*	1,00	12.00	12.50	12.50	43.00	13.00	13.00	13.00	13.00	43.00	13.25	12:5	10.07	13.73	41.75	41.75	41.05	14.14	12.00	41.75	41.35	41.40	11.25
,08 x 80, 30-inch, 11.35 yds.	3.0	1 1	1 2	12	7	50	( ?	20	2()	20)	50	()2	7.0	2.0	20	2.0	20	20	7	2.3	2.)	2.1	7	2.0	20	2.)
,001 x 00 ,corinch, ,2by 00.7	C	) C	0.10	0 0	0 0	0	0/2	20	0.5	015	0,16,	20	05	05	200	50	20	50	05.	0.5	05	20	20	0.5	015	0,15,
88 x 80, 40-inch, 8.50 yds.					9									0+									0+		0+	
10 x 72, 40-inch, 50 x 72,	92	92	98	2	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	100	100	100	552	225	351
36-inch.	20	~	×.	22	<u>~</u>	×.	1.52	×.	Z.	1.5.	18.	<u>~</u>			52	Z	- 50 - 50 - 50	18.	-S.	- Sc	<u>x</u>	 	×.			
,45 x 48, ,45mi-18, ,-by 00.8	1.01	ī-:	10:	103	101		101	20	20	20	20	20	30	20	50	20	20	30	20	0,1	50	20	20	50	20	20
.48 x 48, .45 x 48, .40 x 48,	24,	1 10	19	10	10	100	15.	10.	10.	100	252	(1) (1)	10	16,	100	100	10	100	100	10,	125	10	100	100	16	202
.doni-98 .doni-98 .by 00.8	.c.	20.00		30	30	30	30	30	30	30	30	.30	305	305	305	305	305	305	305		3:05	302	305	301	30	3:0
68 7 68 30-inch, 400 co.t	5.5	33	33	3.3	3.3	3.3	33	.23	53	3.3	33	3.3	3.3	33	33	53	3.3	33	53	33	33	33	33	53	33	.3.3
92 x 22 20-juch 23 x 50	.30	30	30	.30	30	30	30	.30	30	30	.30	30	30	30	30	30	.30	30	30	30	30	30	.30	20.2	20.5	202
20-inch. 30-inch. 50-x 72.	20.2	203	202	201	207	27	1-	12	- 1	1,1	1 - 1 - 21-	27.2	2/2	1,1	1-	17	7.7	50.		000		502	102	0.7	50.7	30°
64 x 60 -by 75.5 -by 75.5	10	25	10	25	10	10,	10.	50	07	0.7	50	5()	0.7	50	0.	50	0.7	50	30	20	0.7	000	(1 (1) (1)	10	17. 17.	100
58. inch 58. inch 6.25 yd-	23	87	23		53	2,3 5	7	<u>~</u>	7	+	t	7:		7	7	7	+	+	7	7	7-	†;	<u>-</u>	+	22.5	23.5
56 x 52, doni-72	10	1.5	12	16	12	<u>.</u>	K !	<u></u>	101	ic.	10		71-	10, 1	:::- :::::::::::::::::::::::::::::::::	60	0	:a-		- C	- C	n-	5		5	121
52-inch.	0.1	9	ÇI	<u>.</u>	<u>.</u>	50.	: i	Ĩ-	e in	2 3		0 3	101	2 3	2 3	 	- ·	= 3	2 3			, T		e - C -	0 :	
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	E.E.	Ξ.	E S		0 11.1.	 E E		_		7 1 17	April 15	1 1	91	Vivil 13		inil 10			April 55		Vivil 36		72			200
	7	7.	7.		7.	7.5	7-				7.5		-	7 2	7		7.5			<u>ت</u>			-		÷÷	-

Exchange closed

(Compiled by C. H. Pope & Company)

## WANAMAKER CUT RETAIL PRICES IN MAY

May proved to be a quiet month, with continued pressure being noted in consequence of financial conditions, and the continued tangle in It became necessary for selling agencies to extend accommodation to customers whose goods were tied up on the railroads or at the ports through strikes and embargoes of many kinds. Prices held surprisingly steady on print cloths and sheetings, but owing to unloading on the part of second hands and some converters, fine gray goods such as voiles declined sharply. The staple plain qualities held their values better. Early in the month Wanamaker, one of the large New York retailers, cut prices on all merchandise 20 per cent, and trade in first hands became very dull, but without any material weakening. Toward the end of the month when a few goods were needed by bleachers and converters a decline in print cloths was stemmed and recovery seemed under way. transportation channels.

		_
Cotton, Spot, N.Y.	* + 11.45	40.00
.88 x 88 .50-inch, .25 yds.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56
,400 y ds. 40-inch, 96 x 100,	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	46
88 x 80, 40-inch, 8.50 yds,	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	35
9.00 yds.	$\begin{array}{c} \omega \ \omega $	30
48 x 40, 36-inch, 5.50 yds.	8	91
,8 x 48, 31-inch, 5.00 yds.		181
48 x 48, 36-inch, 4-00 yds.	20 20 20 20 20 20 20 20 20 20 20 20 20 2	23
80 x 88, 39-inch, 5.00 yds.		$30\frac{1}{2}$
80 x 80, 39-inch, 4-00 yds,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29
4.25 yds. 39-inch, 72 x 76,	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	27
39-inch, 47.5 yds.	000 W W W W W W H H H W W W W W H H H W W W W H H H W W W W H H H W W W W W H H H W W W W W H H W	7.7
64 x 60, 5.35 yds.	- Internal	23
.84 x 00 .485 .25 yds.		21
9.00 yds.	# # # # # # # # # # # # # # # # # # #	15
sp.£ 09.2 '42ui-72 '00 x £0		$15\frac{1}{2}$
	25 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	· ·
	May May May May May May May May May May	Ĭ.

\* Exchange closed

# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by C. H. Pope & Company)

### IN JUNE MARKETS WEAKENED SLOWLY

In June the markets weakened very slowly. Trading was quiet and converters were particularly conspicuous by their absence. One or two printers bought cloths for delivery in the third quarter of the year, and some few contracts were placed for the last quarter of the year at prices down in some inclusion and the prices are the prices down in some inclusion and the prices down in some inclusion and the prices down in some inclusion and the prices are the prices down in some inclusion and the prices are the prices and the prices are t e e

of the year.			-		-	_										
	.sby 00.7 ,doni-72 ,00 y 40	26 x 52, 27-inch, 26 x 52,	60 x 48, 38½-inch, 6.25 yds.	64 x 60, 5.35 yds. 5.35 yds.	39-inch, 4-75 yds, 4-75 yds,	36-inch, 72 x 76,	80 x 80, 39-inch, 4.00 yds,	80 x 88, 39-inch, 5.00 yds.	48 z 48, 36-inch, 4.00 yds.	48 x 48, 31-inch, 5.00 yds.	2.50 yds.	9.00 yds.	88 x 80, 40-inch, 8.50 yds.	96 x 100, 40-inch, 7.00 yds.	88 z 80, 30-inch, 20-z 55 yds	Cotton, Spot, XX
				-		_			_	- 10	-					
Tage 1	152	15	7.7	232	24	2.7	30	30	55	182	103°	50	3.3	15	50	*
June 2 · · · · · · · · ·	152	1.5	21	23 i	54	27	305	30	22.4	182	103	282	322	45	50	10.00
June 3	152	15	21	24	5.4	27	31	36	222	181	17	28	3.2	15	26	10.00
June 4	152	173	2.1	232	2.4	27	31	30	222	181	17	28	3.2	45	20	40.00
	121	144	2 I	2.4	244	27	31	36	23	183	17	28	$32\frac{1}{2}$	45	56	40.00
	15.2	1.5	21	†;	242	2.2	31	36	23	- 5° -	17	28	33	+5	56	10.00
June 8	152	15	21	2,3 2	5.4	27	31	36	222	182	17	28	3.3	45	26	40.00
	152	14.	2.1	232	7.4	27	302	352	2.2	187	17	28	3.3	45	252	10.00
June 10	154	142	21	232	24	27	30	.35	2.2	181	17	28	3.3	15	25	10.00
	121	7	2.1	232	2.4	27	30	342	2.2	SI	17	28	33	- CT ++	242	10.00
	152	142	21	232	234	2.2	30	34	22	2.5	17	28	33	7	7.7	10.00
	152	175	21	23.2	234	27	30	34	2.2	SI	17	28	$32\frac{1}{2}$	‡	7.7	30.50
	152	1+2	21,	234	23.4	27	30	33	2.2	2	10,	28	3.2	‡	7.7	30.50
June 10	152	142	20.	234	23.4	202	202	33	22	21	$10\frac{5}{2}$	28	3.2	<del>;</del>	7.7	30.25
	152	175	202	2.3	234	202	20	33	2.5	SI	$10\frac{1}{2}$	S	312	432	2.4	39.25
	151	142	20	2.3	232	203	20	3.3	214	21	101	272	31	4.3	7.4	39.25
	121	142	20	23,	232	202	20	324	21 ±	si Si	101	272	31	43	77	30.25
	151	1+1	20	2.2.5	234	201	20	322	212	21.	10	272	302	43	24	38.75
	151	14	20	223	23	50	28.5	3.2	211	173	16	272	30	~:	7.7	38.25
	15	14	20	222	224	20	282	3.2	2 I	17	91	272	30	4.3	7.7	38.25
	15	1.54	50	222	223	20	28	3.2	2.1	17	10	272	30	~	77	37.75
	15	132	20	2.2.2	222	36	28	3.2	2.1	17	91	27.2	30	4.3	2.4	38.25
	121	134	192	222	223	50	28	3.2	2.1	17	91	27	202	423	7.7	38.25
June 25	1.5	13	192	2.2	222	50	28	32	2.1	17	152	27	20	122	77	38.75
	1.5	1.3	192	2.2	222	97	28	32	21	71	152	27	20)	422	5.4	38.75
June 30	15	1.3	$10^{\frac{1}{2}}$	22	223	50	28	3.2	21	17	152	203	20	7	2.1	38.73

\* Exchange closed

# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by C. H. Pope & Company)

### LIQUIDATION STARTED POSITIVELY IN JULY

out the month the markets were irregular and weak, many cases of liquidation of stocks being reported. The feature of the month was the in a very small way. Soon after converting lines were shown many price reductions were made by individual firms in the effort to stimulate Buying of cloths, following the Fourth of July, was light, and large operators could not be induced to come in at any concession. Throughnaming of prices on dress ginghams for spring, 1921, by the Amoskeag and others, on the price basis named in January. Prices were guaranteed to December 1, and deliveries would not begin till December 1. The openings of fine wash goods were attended by many buyers who operated Finishore printers and mills born curtailing production

	$\sup_{Z \text{pot}}$	30.75	40.00	41.00	10.50	40.50	40.50	00.14	42.00	42.50	42.50	42.25	42.25	43.00	43-75	43.75	43.75	42.00	0.01	0.01	0.01	0.01	40.00	10.00
	88 x 80, 30-inch, 11.35 yds.	7.7	7,	7.	t 7	+-	2,3,2	2.3	2.3	23	2.3.1	232	23.3	2.3 2	232	233	23	23	C1 C1	223	223	C. C.	- CT	2.2.2
	,don'z 00, ,don'-ot, 7.00 yds.	7 7	- 7	7	- F T	+	+I	101	†o†	0+	0†	0+	0†	0+	9	0+	0+	0+	0+	0+	0+	30	39	30
	.88 x 80, 40-inch, 8.50 yds.	20	20		લ જ	28	28	250	ž,	25	28	S	S.	S	ş	sş.	28	5×2	s,	27.2	27.5	203	50g	202
	0.00 yds. 40-inch, 76 x 72,	202	20.1	203	2013	20	50	12.	12.	25.2	10	25.2	15.	125	22.0	10	254	5.	. 52	243	242	7.7	7-	7.7
	48 x 40, 5.50 yds.	1 2 3 1 1 2 3 1 1 1 2 3 1 1 1 1 1 1 1 1	151	151	2 E	15	15	15	1+1	- č	1+2	1+2	I+2	1+3	î†î	14.1	1+1	1+1	1+1	I+1	1+1	†1	† <sub>1</sub>	+
	48 x 48, 5.00 yds.	17	103	101	10.1	101	10	10	15.1	12.5	15.	15.	151	121	15.	121	151	151	1.5	13	15	15	15	15.
	.84 x 84 ,45ni-38 .sby 00.4	21	202	202	0 0	50	10,	$10\frac{1}{2}$	10	181	181	SI	SI	SI	IS	S.	I 7 3	I 7 4	$17\frac{3}{4}$	I 7 3	7.1	17	17	12
	,88 x 08 ,49mi-08 ,500 yds,	3.2	$31\frac{1}{2}$	314	30,1	304	30	30	202	$20^{\frac{1}{2}}$	203	202	202	20 1	20	20°	282	28	200	28	28	28	28	28
	80 x 80, 30-inch, 4.00 yds.	272	272	272	272	271	27	27	203	20	20	25.	25.	22	25	77	242	243	77	77	7.7	7.7	7.7	7.4
	30-inch, 30-inch, 72 x 76,	30	30	50	2 5 2 5 12 3	25.2	10	25	243	2+3	243	242	242	77	233	23	23	23	23	23	23	23	23	23
Hon.	,55 x 80 ,99-inch. ,4-75 yds.	2.7	211	21	0 0	20	103	102	101	61	10	10	10	10	18	18	18	SI SI	18	172	171	17	17	17
produc	. 45 x 50, 25 x 60, 25 x 65. 5	213 213	2 I C	203	20 IQ3	101	10	10	61	10	1.0°	1851	1.8	$\sim$ 1	SI	s.	$\frac{1}{\infty}$	173	$17\frac{1}{2}$	17	17	7.1	7.1	17
talling	.84 z oò ,45ni-585 .eby 25.0	01	10	183	1 S 2 S	18	172	171	17.	$10^{\frac{2}{3}}$	I(0)	10	15.	15.4	154	152	12	151	154	15	1+3	1	1	1+2
oegan curi	.28 x 88 ,45mi-72	13	1.23 1.243	123	1.2.4 1.2.3	122	I 2 3	12 5	123	121	$12\frac{1}{2}$	123	$1.2\frac{1}{2}$	121	I 2	1.2	I 2	I 2	1.2	I 2	I 2	1.2	1.2	î 2
v.	og x t9 '49ui-72 '50 y t9	K h	1+3	143	+ + + +	1+3	1+3	1+2	$1+\frac{1}{2}$	$1+\frac{1}{2}$	$14\frac{1}{4}$	+1	† <sub>1</sub>	1,4	+1	134	132	13	13	13	13	13	13	13
and mi																								
finishers, printers																								
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Finis																								
		2 6			 o o	. oi	12.	13.	14.	15.	. 91	17.	. 61	20 .	21.	2.2 .	23.	7.7	26.	27 .	28 .	29 .	30.	31.
orders.		July	July	July	July	July				h.,	July		5	July	July	July			١.		July		) July	£.
_		•	•		-	•	•	•			•													

\*Exchange closed

# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by C. II. POPE & COMPANY)

made through second hand channels and prices dropped steadily, without offering many opportunities for realizing. Curtailment of production among the mills became general, especially in the late weeks of the month. Prices on bleached cottons were revised about 20 per cent from the extreme top, and prices guaranteed to October 15. Wide sheetings were revised by a few agents. On branded goods the general disposition was to hold values as steady as possible. The collapse of the cotton yarn markets was a feature of the last weeks of the month, following the decline In August the cloth markets were generally inactive so far as actual volume of new business was concerned. Many sales in liquidation were CURTAILMENT OF PRODUCTION BEGAN IN in cotton.

$\frac{1}{N}$	00.01	30.50	0.50	30.50	0.50	30.50	30.00	00.0	00.6	0.00	7.50	7.50	05.0	00.0	2.00	34-25	3.50	3.50	2.50	3.50	3.50	33.50	3.50	100	15.	31.75
(Jorron*	+	.34	ž.	3.	35	.3(	35.	.3(	.3	.3	٧,	۲,	75,	ř.,	·C	'n.	ĸ.	ď.	·C	°Ć	eri.	ć	17,	ń	rĊ.	~
.88 x 80,	2.2.2	2.2	C.1	C1	~;	C1		7	21	-1	7.1		-	17	7.7		=	-7	7	0.7	0,	20	0,	[0]	10	-
90 z 100, 10-inch. 7:00 yds.	30	 	250	3.5.1 2.5.2.2		×.	372	57.5	37	303	30%	30	30	30	10	351	10	15	3+6	3.4		.34	÷s.	÷ ; ;	÷	+;
.88 x 80, .450 y ds.	201	203	202	201	201	201	201	201	201	2()	5()	3()	50	5()	7()	5()	5()	20	5.0	50	25.2	10	16.	16	15,	10
,27 x 07 ,40ni-04 ,000 yds.	7.7	233	232	2.3	2.3	2.3	2.3	222	C	223	2.2.1	2.2	- 1.7		17	17	2.1	2.1	7.7	20.	20.	20	20	50	20	0.7
,45 x 40, ,450 y 40, ,50 y 65,5	11	†	133	1.3 2	1.3 2	132	132	131	1.3	1.3.1	1.3	13	1.3	1.3	1.3	1.3	1.3	1221	1.2 2	122	100	- 57		1.2	I I .	ĪĪ
48 x 48, 31-inch, 5.00 yds.	100	15.	1+1	- <del>-</del> - <del>-</del>	1+13	1+1	1+1	+	133	132	132	1.3.1	131	1.3.1	131	13.1	131	L3	1.3	1.3	1.3	1.3	1.3	12.1	1.2	1.2
,84 x 84 ,450r-68 ,26-70ch,	1,7	1.7	1 7	1()]	1()1	-01	1()	57.	15.1	17	151	15.5	151	15.	12	1+3	1 + 2	+1	1 +	+1	1.4	+1	131	132	132	131
.88 x 08 ,40mi-08, .8hrg 00.7	S.	27.3	27.3	272	2,12	1,	203	20.3	20	25.3	200	- 0	152	1/2	10	1/7	10	100	10	15	10	1/3	10	10	5.	10
80 x 80, 30-inch, 30-yoby	2.3.1	23.1	23	22.5	223	223	2.2.4	2.2	215	2.1	201	20	0	0.7	0.7	0.1	20	20	20	20	20	IO.3	101	10	0.1	01
.65 x 27 .64 x 24 .72 x 76.	222	2.2.1		213	21.5	2.1	202	202	20	10.5	101	10	- :- - :-	- :: - ::	-:- -:-	- £	-:- -:-	1.5.1	-S.	15	2.	×.	SI	$\sim$ 1	2.	2.5
,27 x 80 ,45mi-68, ,8by 87.4	17	17	. 1~	1.7	1.7	103	103	103	103	10.	101	10	10	10	01	10	01	E +	10	12	120	- 20	15	. 10	5	- <del>-</del> +
.64 x 60, .8½-inch.	-1	- 1	17	. 1/	17	103	103	103	103	10.	10.1	ç	Ç	1()	() I	10	0.1	15.1	10	10	10	10	12	. 15	1.5	1+2
.84 x oo ,40ni-488, .8by 82.0	1.4.1	17	171	1.1	ŢŢ.	13.3	133	13.1	1.2.3	123	123	125	1 2 2	123	125	125	12.	1.2.1	1 2	1.2	1.2	1.2	1.1.	113	11.5	11 2
,45 x 68, ,45 x 68, ,60 y 68,	12	113	11.3		113	11	11	1.1	103	10.	10,1	10,1	101	03		0	E 7	0.1	5	0	-:	0	0.0	()	0 2	$0^{\overline{1}}$
sp. 60 x 19. 500, 7	~	2	; T	123	1.23	1.2.5	121	123	121	1.2.1	1.2	1.2	11.	-:	: - : - : - :	111		1.1	1.1	1.1	-	1.1	1	1.1	-	10.1
																							-			
	c						-	-		1 2		7 =			0											131
	Anonet	Anongt	Angust	Amerist	Anonst	Anons	Angust	Angust	Angust	Anonst	Angust	Angust	Angust	Angust	Angust	August	Angust	August	August	August	'Augus	August	Augre	August	Augus	August

# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by C. H. Pope & Company)

### GINGHAM MANUFACTURERS PROVIDED SHOCK IN SEPTEMBER

prices a little. Before the end of the month the gains were wiped out. Raw cotton became much unsettled and contributed greatly to the unsettled conditions in cloths. About the middle of the month gingham prices were revised unexpectedly by the largest producer, and a few days later the fact was telegraphed all over the country and created further unsettlement concerning values as viewed by the buyer. Owing to the In September cotton goods prices moved downward until toward the middle of the month, when there was a moderate spurt of buving that lifted uncertainty that existed many selling agents for knit goods and other spring lines were unable to get action from buyers, and further delays in trade were enforced.

Cotton, Spot, XX,	30.25	31.75	31.75	*	32.25	31.75	31.75	32.25	31.75	31.25	31.00	31.00	31.00	31.00	31.00	31.00	31.00	30.50	20.50	28.50	28.00	20.00	26.00	20.00	25.50
88 x 80, 30-inch, 11.35 yds,	10	10	10	61	10	10	61	10	10	19	10	61	10	19	61	10	10	19	10	61	19	10	181	182	182
too yds.	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	₹	34	34	34	34	$33^{\frac{1}{2}}$	332	$33\frac{1}{2}$
,08 x 88, ,10-inch, 8.50 yds.	242	7.7	77	77	24	24	24	74	77	77	7,4	24	241	243	25	25	25	25	25	23	25	25	25	25	25
,25 x 97 ,4501-04 ,25 x 92,	50	20	20	20	20	10 3	$10^{\frac{1}{2}}$	103	20	20	20	20	204	202	21	2.1	21	21	2 I	21	2.1	21	21	21	21
48 x 40, 36-inch, 5.50 yds.	113	II	$11\frac{1}{2}$	11 2	11 2	11.1	1.1	11	11	11	11	11	$11\frac{1}{2}$	$11\frac{1}{2}$	11.5	112	1.2	1.2	1.2	113	$11\frac{1}{2}$	11	11	11	II
,8 x 8, 31-inch, 5.00 yds,	1.2	1.2	1.2	1.2	1.2	113	i i	112	ΙΙ	11	11 ÷	11 2	11 ±	11 4	11.3	1.2	1.2	1.2	1.2	1.2	1.2	$11\frac{1}{2}$	$11\frac{1}{2}$	$11\frac{1}{2}$	11
,48 x 48, 36-inch, 4.00 yds.	$13\frac{1}{4}$	134	134	134	131	134	134	134	13	13	13	13	132	†ı	+1	†ı	† <sub>1</sub>	†1	† <sub>1</sub>	134	134	132	13	13	13
80 x 88, 39-inch, 5.00 yds.	25	25	25	25	25.	25	25	25	23	- 25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
80 x 80, 39-inch, 400 yds.	61	61	% 10°	61	61	16	182	182	182	182	182	187	61	61	10	10	10	10	19	10	10.4	182	1S	21	SI_
39-inch, 39-inch, 4.25 yds,	1.8	21	I.S	21	21	Si Si	17.	17 ±	18	18	18	18	18	18	S1	18	18	18	∞.	173	173	172	17	17	41
475 y 68. 39-inch, 475 y ds.	15	15	15	15	15	15	17.	1+1	15	152	91	91	91	91	91	91	91	91	91	152	152	15	15	15	15
,64 x 60, 38½-inch, 5.35 yds,	1+1	142	1+2	142	77	1+2	† †	1	<u>+</u>	+	1+2	1+2	15	15	12	12	1.5	15	1+1	101	1 + 2	†	+1	134	132
,84 x oo ,48£-inch, ,253 yds,	11 2	ž II	11	III	11	11	11	11	11	FII	II	117	1.2	1.2	1.2	1.2	1.2	1.2	1.2	11 <u>5</u>	117	11 2	117	î I I	112
,28 x 82, ,72-inch, ,20-ooyds.	$0^{\frac{1}{4}}$	6	6	6	6	6	6	6	6	6	S) 410	N 440	00°	6	6	6	6	6	6	6	6	6	6	° 141°	200
,00 x t0 ,450i-75	101	0	OI	101	10	10	01	01	10	10	10	10	10	10	10	10	10	10	10	01	01	0	92	0	$0^{\frac{1}{2}}$
							:	:	:		:			:	:	:	:							:	
		:				:	:		:		:	:		:	:	:	:			:	:	:	:	:	:
				:										:	:			:							•
	I	C)	3	+	<u>_</u>	00	6	0	II	13	††	13	10	17	2	20	21	22	23					29	20
		September	- T	September				September	September	September	September		September		September		September	September	September	em	September	em	September	September	September

\* Exchange closed

# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compil d by C. H. Pope & Company)

October was generally a month of very light trading and steadily declining prices. Contributing factors to the unsettled conditions were the prices of second hands where small lot liquidation was constant. New prices were named on bleached muslins in the middle of the month on a basis of 15c a yard decline, while percules were cut to 15c from 3oc. Many jobbers throughout the West held liquidation and readjustment sales without adding much to the volume of business at first hands. Agitation for lower prices was nation-wide. The weakness in cotton was a STEADILY DECLINING PRICES IN OCTOBER

ne end of the	Cotton, Spot XX	25.00 25.25
e arranment or production among the mills grew to very large proportions, especially toward the end of were announced.	88 x 80, 30-inch, 1.35 yds.	20 20 20 20 20 20 27 12 1 20 20 20 20 20 20 20 20 20 20 20 20 20
oward t	,001 x 00, ,doni-ot, ,ev y ds.	2121 21 221 221 222 2 223
ially to	88 x 80, 40-inch, 8.50 yds.	44 4 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
s, espec	,40 x 72, 40-inch, 9.00 yds.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
ortions	30-inch, 30-inch, 5.50 yds.	$ = \frac{1}{2} \cdot \frac$
ge proj	48 x 48, 31-inch, 5.00 yds.	1 1 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ery far	,84 x 84, 36-inch, 200 yds.	
7 01 W	80 x 88, 39-inch, 5.00 yds.	2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
SILE SILI	80 x 80, 30-inch, 4.00 yds.	18 17 10 10 10 10 10 10 10 10 10 10 10 10 10
	, 39-inch, 19-inch, 1-25 yds.	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
	.55 x 52, 39-inch, 4.75 yds.	
	64 x 60, 38½-inch, 5.35 yds.	E E E E E E E E E E E E E E E E E E E
ed.	.84 z oo .884-inch, .25 yds.	
nnoune	56 x 52, 27-inch, 9-00 yds.	20 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
were a	*99 x 49	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
month, and some wage reductions were announced		ber 2 ber 3 ber 4 ber 4 ber 5 ber 6 ber 7 ber 9 ber 19 ber 11 ber 12* ber 13 ber 14 ber 15 ber 16 ber 15 ber 16 ber 17 ber 17 ber 17 ber 17 ber 18 ber 19 ber 19 ber 10 be
month,		October

\* Columbus Day, Exchange closed

# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by C. H. Pope & Company)

In November there were many unusual developments, notable among them being the ruthless marking off of profits through price reductions and the vast increase in the curtailment of production in mill centers. Immediately after election, and an overwhelming Republican success, a carpet and rug auction was announced. Contrary to many fears, buying support was extended from all over the country and all merchandising to stimulate a movement of goods, several of the largest houses handling bleached and brown domestics announced a willingness to ship goods "on memorandum." Finally at the end of the month there were announcements of many jobbers' sales at low prices for the purpose of liquidatwas assisted by the success of the sale. Finishing prices were reduced to per cent. In the middle of the month, when price reductions had failed ing high priced stocks. Throughout these many changes, gray goods were about as inactive on the whole as in any similar period in many years, RUTHLESS PROFIT-CUTTING IN NOVEMBER

barring the one year 1018, v	when the	he armi	armistice was signed	ıs signe _	. –	)				_		-				_	
		64 x 60, 27-inch, 7.60 yds.	56 x 52, 27-inch, 9.00 yds.	.84 x 00 .38 year, 52.0 .25 yds.	5.35 yds.	68 x 72, 39-inch, 4.75 yds.	39-inch,	80 x 80, 39-inch, 4.00 yds.	88 z 08 .39-inch, 5.00 yds.	48 x 48, 30-inch, 4.00 yds.	48 x 48, 31-inch, 5.00 yds.	48 x 40, 30-inch, 5.50 yds.	76 x 72, 40-inch, 9.00 yds.	88 x 80, to-inch, 8.50 yds.	,400 x 400,700,700,700,700,700,700,700,700,700,	88 x 80, 30-inch, 11.35 yds.	Cotton, $Spot$ , $XX$ .
November 1		1,	1-		01	1113	1 3 3	7	81	IO	Si	×	113	18	223	7	22.50
November 3		÷~ -	() <sub>1</sub>		10	11:	1.5		172	01	S	~	1-0	18	2.5	+	22.10
Vovember 4		, 1/	0	S	OI	111	132	+	17	101	S -12	7 3	1 2 2	81	2.2	132	21.65
November 5			$(0\frac{1}{2})$	 	OI	111	1.3	$13\frac{1}{2}$	1.7	01	S 14	7 3	1+2	18	2.2	132	20.85
Vovember 6		7	$0\frac{1}{2}$	81	OI	1.1	1.3	1.32	17	01	-00 -14	7.3	†	173	2.2	132	20.25
November 8		0,40	0.3	S	000	103	1.3	13	71	10		7.3	+	173	213	132	20.45
Fovember 9		0 4 3	6,1	œ	03	IO 3	123	13	17	01	~ ~	7.2	+1	17	21	13	10.85
Tovember 10		0 4	9	S	03	103	12 <u>3</u>	1.3	71	0,453	~ ~	13 17 -/1	†1	17	202	13	20.05
Vovember 11		0 4	9 .	S	0 1	101	1.2	13	$10^{\frac{1}{2}}$	0	~ ~	7.3	1+	17	20	13	20.05
Sovember 12 · · · · ·		03	9	/1 3	6	10	1 3	123	101	0	S	7.3	$13\frac{1}{2}$	163	192	1,3	01.01
November 13 · · · · ·		03	9	7 3	0	. <del>1</del>	1.2	122	101	0	ss.	7.3	$13\frac{1}{2}$	103	192	13	10.40
November 15 · · · · ·		63	9 .	7 1	  	03	112	1.2	103	0	∞	7 2 2	$13\frac{1}{2}$	162	19 <u>3</u>	12.2	19.25
sovember 16		03	9	7		03	112	1.2	$16\frac{1}{2}$	02	00	7	132	103	103	122	10.25
Vovember 17 · · · · ·		0	9	7	×	0	ΙΙ	1.2	$\frac{5}{10^{1}}$	03	 	7	$13\frac{1}{2}$	101	102	I 2 2	18.75
November 18		9	5.4 5.4	7	~ ~	0	1 1	1112	101	0	2,40	7	$13\frac{1}{2}$	161	103	123	18.05
November 19 · · · ·		9	1/C)	7	7.3	0	II	1 I I	101	6	7	~1	$13\frac{1}{2}$	101	103	122	17.55
November 20		9	ν. Ε. 4	0.3	7	∞ ~	01	11	01	0	17	7	132	101	192	F 2 2	17.25
November 22 · · · ·		9	 	0,3	7.1	% **	101	11	7. 2.2.	6	27	- 9.† 9	132	17	50	123	17.10
November 23 · · · ·		9	 	613 O	7 2 7	0	101	ΙΙ	152	0	7	$6\frac{1}{2}$	133	17	0.7	122	17.30
November 24		9		6 <u>1</u>	7.3	6	101	II	151	∞ 103	7	03	132	17	20	123	17.30
November 26		9	5.3	0 †	7 3	0	103	11	15	23 10 10 10 10 10 10 10 10 10 10 10 10 10	7	$6\frac{1}{2}$	132	17	30	123	15.85
November 27 · · · ·		9	 6 4	63	/1 ~	0 1	102	II	15	∞ 1,5,	7	$6\frac{1}{2}$	$13\frac{1}{2}$	17	102	I 2 2	15.50
November 29 · · ·		9	-27	e <del>†</del> 9	73	0	101	103	15	S <sub>2</sub>	7	0.5	$13\frac{1}{2}$	162	61	122	15.75
nber 30		9	10	63	×	-6	101	103	15	 2,2	7	$6\frac{1}{2}$	$13\frac{1}{2}$	101	61	$12\frac{1}{2}$	0.01

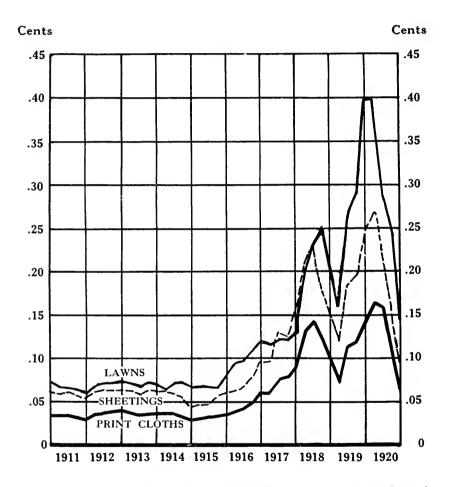
# PRICES OF GRAY CLOTHS AND SPOT COTTON DAY BY DAY DURING 1920 (continued)

(Compiled by C. II. Pope & Company)

### GENERAL REVISIONS IN DECEMBER

A wage reduction of 223,2 per cent went into effect in New England mills. Curtailment of production in the latter part of the month was estimated to have reached 50 per cent of capacity in cloth mills and 60 per cent or more in finishing plants. Wide sheetings were reduced from a basis of 80c to 55c a yard for 10-4 bleached goods. On December 30 a very drastic revision of prices on staple ginghams and other products of Moderate buying on the part of a few large interests during December sufficed to m intain wide print cloth prices fairly steady for the month. the Amoskeag Company was made, following the one in September, and bringing staple ginghams down to 1015c net. On the following day all the other leading gingham selling agents revised their prices.

### PRICES OF STAPLE COTTON CLOTHS IN THE UNITED STATES ON FIRST OF EACH QUARTER DURING YEARS 1911 TO 1920 INCLUSIVE



The above chart is based on the statistics given on the next page. It shows the prices of three staple cotton cloths, in cents per linear yard, in the United States, on the first of each quarter during the years 1911 to 1920. The bottom curve (heavy solid line) shows the prices of 28", 64 x 64, 7-yard print cloths. The middle curve (broken line) shows the prices of 36", 56 x 60, 4-yard sheetings. The top curve (light solid line) shows the prices of 40", 88 x 80, 8.50-yard lawns.

### PRICES OF STAPLE COTTON CLOTHS IN THE UNITED STATES ON FIRST OF EACH QUARTER DURING YEARS 1911 TO 1920 INCLUSIVE

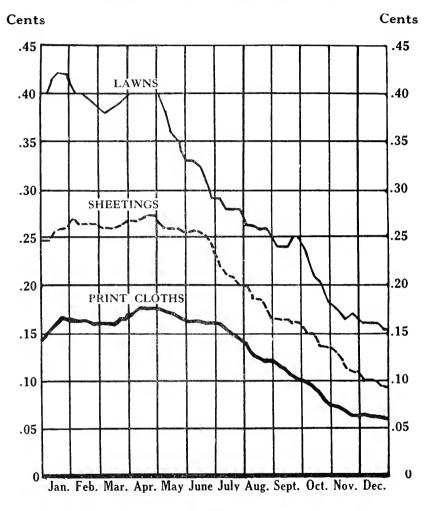
(Prices of Print Cloths and Brown Sheetings are from the New York Journal of Commerce. Prices of Fine Lawns were compiled by C. H. Pope & Co., Cloth Brokers)

### Prices are Per Linear Yard

Date	Print Cloths 28", 64 x 64 7 Yards per Lb.	Brown Sheetings 36", 56 x 60 4 yards per Lb.	Fine Lawns 40", 88 x 80 8.50 yards per Lb.
January 1, 1911		\$0.06\frac{1}{1}	$\hat{S}_{0.07}\frac{1}{5}$
April 1, 1911		.00	$.06\frac{3}{1}$
July 1, 1911	.035	.00 to .051	$.00\frac{4}{1}$
October 1, 1911		$.00\frac{3}{4}$ to $.05\frac{7}{5}$	.00 1/2
•	$.03\frac{1}{2}$		
January 1, 1912	0.2	$.05\frac{3}{5}$ to $.05\frac{1}{2}$	$.06\frac{1}{4}$
_* , , , , , , , , , , , , , , , , , ,	03%	$.06\frac{1}{8}$ to $.06\frac{1}{4}$	.07
0.71	.03 \( \frac{1}{6} \)	$.06\frac{1}{4}$ to $.06\frac{1}{2}$	.07 \frac{1}{5}
	.01	$.06\frac{3}{5}$ to $.06\frac{1}{2}$	$.07\frac{1}{5}$
January 1, 1913	$.04\frac{1}{16}$	$.00\frac{1}{2}$	.07 \frac{1}{4}
April 1, 1913	.03 \frac{7}{2}	$.00\frac{1}{4}$ to $.00\frac{3}{5}$	$.07\frac{1}{5}$
July 1, 1913	U 1	.06 to .06 $\frac{1}{5}$	.07
October 1, 1913	.03 \frac{7}{5}	.c6 \frac{3}{5}	.071
January 1, 1914	.03 <sup>3</sup> / <sub>4</sub>	.00\frac{1}{2} to .00\frac{3}{8}	.07
April 1, 1914	.035	$.00\frac{1}{8}$ to $.00\frac{1}{4}$	.001
July 1, 1914	.03 $\frac{3}{4}$	.00	.07 \frac{1}{8}
October 1, 1914	.033	$.05\frac{1}{2}$	$.07\frac{1}{8}$
January 1, 1915	.02}	$.04\frac{1}{4}$ to $.04\frac{1}{2}$	.06 \$
April 1, 1915	.03	.04 <sup>3</sup> to .04 <sup>7</sup>	$.06\frac{3}{4}$
July 1, 1915	.031	.04 7	$.06\frac{3}{4}$
October 1, 1915	.03\frac{3}{5}	$.05\frac{5}{5}$ to $.05\frac{3}{4}$	.07
January 1, 1916	$.03\frac{1}{2}$	.00	.08
April 1, 1916	.0.1	$.06\frac{1}{4}$ to $.06\frac{3}{5}$	$.00\frac{1}{2}$
July 1, 1916	$.04^{\frac{1}{4}}$	.005 to .003	$.00^{\frac{3}{4}}$
October 1, 1916	.045	.08	.11
January 1, 1917	.00	$.00^{\frac{3}{4}}$	.12
April 1, 1917	.05 7/8	$.00^{\frac{1}{2}}$ to $.00^{\frac{3}{4}}$	. I I $\frac{1}{2}$
July 1, 1917	$.07\frac{1}{2}$	.13	$12\frac{3}{4}$
October 1, 1917	$.07\frac{3}{4}$	$12\frac{1}{2}$ to $12\frac{3}{4}$	.12
January 1, 1918		$.15\frac{1}{4}$	.13
April 1, 1918	.1.3	.21	$\frac{1}{2}$ 01.
July 1, 1018	.14	.23	$23\frac{1}{2}$
October 1, 1918	.I 2 1/4	$1\frac{1}{4}$	.25*
January 1, 1919	$.00\frac{3}{4}$	.16	$.10\frac{1}{2}$
April 1, 1919	$.07\frac{1}{4}$	.12	.10
July 1, 1919		.181	$.26\frac{1}{2}$
October 1, 1919		.10½ to .20	.202
	$1\frac{1}{2}$		
	2.1	.25 .26½ to .27	.40
			.40
		$\frac{2}{1}$	.29
October 1, 1920		$15\frac{1}{2}$	$\frac{.24\frac{1}{2}}{.1}$
January 1, 1921	$\frac{1}{4}$ 00.	$.00\frac{3}{4}$	$15\frac{1}{2}$

<sup>\*</sup> Government fixed price

### PRICES OF STAPLE COTTON CLOTHS IN THE UNITED STATES DURING THE YEAR 1920



The above chart is based on the statistics given on the next page. It shows the movement of prices of three staple cotton cloths, in cents per linear yard, in the United States, from week to week during 1920. The bottom curve (heavy solid line) shows the prices of 28'',  $64 \times 64$ , 7-yard print cloths. The middle curve (broken line) shows the prices of 36'',  $56 \times 60$ , 4-yard sheetings. The top curve (light solid line) shows the prices of 40'',  $88 \times 80$ , 8.50-yard lawns.

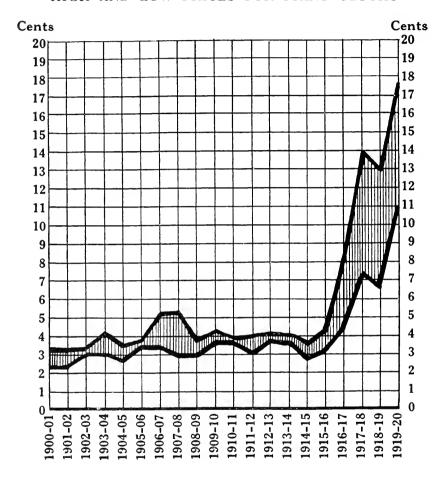
### PRICES OF STAPLE COTTON CLOTHS IN THE UNITED STATES WEEK BY WEEK DURING THE YEAR 1920

(From the New York Journal of Commerce)

### Prices are Per Linear Yard

DATE		Print Cloth 28", 64 x 64 7 yards per Lb.	Brown Sheetings 36", 56 x 60 4 yards per Lb.	Fine Lawns 40", 88 x 80 8.50 yards per Lb.
January	2	$\S_{0.14\frac{1}{2}}$	\$0.24\frac{1}{2} to \$0.25	80.40
	5	$14\frac{3}{4}$	.242 to .25	.40
	12	.10	.25 to .26	$.41\frac{1}{2}$
	19	.101	$.25\frac{1}{2}$ to $.20$	.42
Cl	20	$10\frac{1}{2}$	.26	-42
February		$10\frac{1}{2}$	.27	.41
	9	.104	.26 to .27	.40
	16	.10 <u>4</u> .16	.26 to .27 .26 to .27	.40
March	I	.10	.26 to .27	.39 .38½
	8	.10	.26	.38
	15	.10	.26	.381
	22	$.16\frac{1}{2}$	.26 to .26 $\frac{1}{2}$	.30
	29	$.16\frac{1}{2}$	$.26\frac{1}{2}$ to $.27$	.302
April	5	$.16\frac{3}{4}$	$.26\frac{1}{2}$ to $.27$	.40
	I2	.17 $\frac{1}{2}$	.27	.40
	19	. I 7 ½	.27 to .27 $\frac{1}{2}$	.40
N.I	26	$17\frac{1}{2}$	.27 to .27½	.40
May	3	$17\frac{7}{2}$	.26 to .27	.40
	10	. I 7 ½	.26	.381
	24	$.17$ $.16\frac{1}{2}$	$.25\frac{1}{2}$ to $.26$	.36 •35
June	I	$.16\frac{1}{4}$	.252 (0 .20	·33
3	7	$.10\frac{1}{4}$	$.25\frac{7}{2}$ .25 $\frac{7}{2}$ to .26	·33
	14	.101	.251	.322
	21	.10	.25	.302
	28	.16	.24	.20
July	6	.16	.22	.20
	12	$15\frac{1}{2}$	. 2 I	.28
	19	.15	.21	.28
August	26	. I 4 ½	.20	.28 .26½
Mugust	0	.14	.20 .18½	.202
	16	$12\frac{1}{2}$	$.18\frac{1}{2}$	.20
	23	.12	$.1\frac{2}{7}$	,20
	30	.12	$10^{\frac{1}{2}}$	.25
Septembe	r 7	, I I $\frac{1}{2}$	,101	.24
	13	. I I $\frac{1}{2}$	$10^{\tilde{1}}_{2}$	.24
	20	.101	.10 to $.16\frac{1}{2}$	-25
October	27	$10\frac{1}{2}$	.10 to $.10\frac{1}{2}$	.25
October	4	.10	.15	.232
	18	.00½ .00	.15 .13½	.21 .201
	25	.08	$.13\frac{1}{2}$ $.13\frac{1}{2}$	.10
November	r I	$.07\frac{3}{4}$	$13\frac{1}{2}$	.18
	8	.07 1	.13	.171
	15	.07	.112	.101
	22	.001	.11.	.17
ъ.	29	$.0()\frac{1}{4}$	11.	$.10\frac{1}{2}$
December		.0() ½	.10	10
	13	$.00\frac{1}{2}$	.10	.16
	20	.06½	.10	.10
	27	$.06\frac{1}{2}$ $.06\frac{1}{4}$	$.00\frac{1}{2}$ $.00\frac{1}{2}$	. I 5 ½
	31	.00.	.002	.1 $5\frac{1}{2}$

### HIGH AND LOW PRICES FOR PRINT CLOTHS



The above chart is based on the statistics given on the next page. It shows the high and low prices of 28" 64 x 64, 7-yard print cloth in the New York market. The years as given are the official cotton seasons. Through 1913–14 the seasons were from September 1 to August 31. Starting with 1914–15, they have been from August 1 to July 31.

### HIGH AND LOW PRICES OF PRINT CLOTHS

The table below shows the high and low prices of 28" 64 x 64, 7-yard print cloths, in cents per yard, in the New York market. The years as given are the official cotton seasons. Through 1913-14 the seasons were from September 1 to August 31. Starting with 1914-15, they have been from August 1 to July 31.

Year	High	Low
1000-01		2.37
1901-02		2.37
1902-03	3.37	3.00
1903-04		3.00
1004-05		2.62
1905-06		3.37
1906-07		3.38
1907-08	5.25	3.00
1908-09	3.62	3.00
1000-10		3.62
1010-11		3.62
1011-12		3.12
1912-13	4.06	3.75
1913-14	4.00	3.62
1914-15	3.50	2.88
1915-10	4.25	3.25
1910-17		4.25
1917-18		7.25
1918-19		6.75.
1919-20		00.11

## PRICES OF COTTON DOMESTICS IN THE UNITED STATES FROM 1910 TO 1920

In cents per linear yard

(From the New York Journal of Commerce)

	Jan. 1,	Jan. 1,	Jan. I. Jan. I. Jan. I. Jan. I	Jan. 1,		101	+ 1			10	1015			61	9161	
	0161	1101	1012	1913	Open	High	Low	Close	Open	High	Low	Close	Open	High	Low	Close
Newberry drill, standard	- S	200	2.7	O.C.	S	55	6.3	6.3	0.3	~	19	œ	×	122	×	121
Otis checks	6	0	ŝŝ	0	10	10	×	×	×	IO	×	10	IO	1+2	OI	$I, I_2$
Fruit of the Loom, 4-4 Bleached	IO	6	7 3	oc oc	0 1	0,1	7.5	/1 /*	17	 	ox cu	822	- °	I I 2	8	11 1
8-oz. Stark duck	1.3	133	I 1 3	Ţ	132	132	$I \supseteq \frac{1}{2}$	122	I 2 2	1.3	1.2	1.3	1.3	2.2	1.3	2.2
2.40 blue denim	112	101	20	101	TOI	IOI	×	<u>2</u> ,	S.	103	83	103	1.3	28	1.3	18
Pepperell, 10-4 bleached	S	5.	20	2.3	27	27	2.2	2.2	2.2	36	2.2	97	323	37.2	323	372
Pepperell standard drill	S. 2.	Z.	7 3	.X. ≝.+	S	25	6.3	() 3	63	7 4	63	71	7 3	I 2 2	7 1	123
		Ι	7101			10	8101			01	0161			01	1920	
	$\Omega_{\mathrm{pen}}$	High	Low	Close	Open	High	Low	Close	Open	High	Low	Close	Open	High	Low	Close
Newberry drill, standard	123	20	121	20	20	20	20	215	215	30	SI	20	20	31	17	17
Otis checks	127	23	I.43	53	2.3	20	23	20	28	3.2 ½	242	323	322	35	171	171
Fruit of the Loom, 4-4 bleached	1112	18	I I I	22	IS	30	IS	28	28	35	2.1	35	35	0†	20	30
8-oz. Stark duck*	2.2	3.2	2.2	3.2	3.2	Gov't	Nominal took pro dueti	duet	302	38	25	38	38	0	30	20
2.40 blue denim†	18	323	18	3.2.2	322	332	20	3.1	31	423	282	+23	422	47.2	25	25
Pequot, 10-4 bleached	$37\frac{1}{2}$	55	372	22	55	7.5	52	7.5	7.5	8	09	06	06	9	22	25
Pepperell Standard Drill	I 2 2	20	$1.2\frac{1}{2}$	20	30	20	20	215	215	30	183	30	30	312	1.5	1.5

\* Beginning with year 1919, quotations are on Monarch duck instead of Stark duck.

<sup>†</sup> Beginning with year 1919, quotations are on 2,20 blue denim instead of 2,40 blue denim.

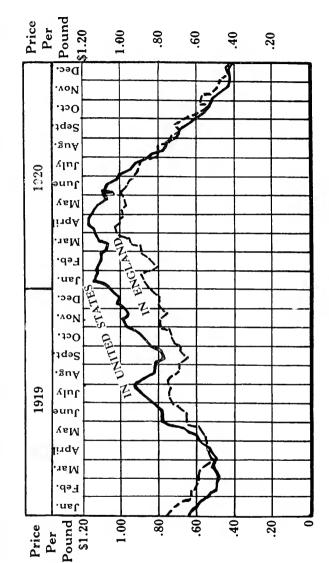
## PRICES OF FINE COMBED YARN COTTON FABRICS FROM 1911 TO 1920

In cents per linear yard

(From statistics compiled by the New York Journal of Commerce)

		EARDIO CONSTDICTION	TPITCLE	6				1161	11			19	1912			19	1913	
		Table Com					Open	High	Low	Close	Open	High	Low	Close	Open	High	Low	Close
88 x 80	30,	11.35 yds					9	0 0 0	+ 50	20.00	N N	53.3	5 + 12 5 - 12	5 0 1	5 10	522	177	+ 0
80	40,	8.50 yds.						7.0 × c	₹9	- 5× 5	50	7.	0 0 0	7 !	717	7 3	£ 0	7 × ×
96 x 100 84 x 80	40," 40,"	7.25 yds					2 ∞	8 8	s ° °	5 0	0 0	94	0 <del>1</del> 3	7 1	7 1	7 3 7 3	~ ~	72.2
		Fabric Construction	TRUCTION					1014	3			19	1915			I	9161	
							Ореп	High	Low	Close	Open	High	Low	Close	Open	High	Low	Close
88 x 80	30,,	_						5.2	4.1	+3	-7	9	7	9	0	0.1	9	200
7.5	, ot						6.1	6,3	25		22.	7.	E 4 6	1.	7.1	101	( )	IO.
08 X 80	· · · · · · · · · · · · · · · · · · ·	8.50 yds					× ×	7.8	° ∞	° 00	 		S F-S	5 6	of 10	152	ć 75	1 1 1 1
	, o	10.50 yds					7.1	. 35 1.4	7	7	7	. ∞ 1√	7	18	81	132	00.1	I 2 3
12	ABRIC	FABRIC CONSTRUCTION		10	7101			8161	81			1910	0,			:61	0201	
•			Open	Iligh	Low	Close	Open	High	Low	Close	Open	High	Low	Close	Open	High	Low	Close
88 x 80	30,	11.35 yds.	0	101	. S.	101	101	10	10.	142	142	27	112	27	2.2	305	711	112
70 x 72 88 x 80	0, 0	9.00 yds.	10	I 13	103	1.2	123	2 2 2	123	10	10 <sub>2</sub>	55 04	152	ç o <del>t</del>	ç 9	n 27	151	15.1
8	, o+	7.25 yds	141	101	132	91	101	29	164	23	23	+1	61	47	47	2.5	172	172
84 x 80	10,	10.50 yds	123	ŤΙ	I 2 3	131	†I	31	1.1	7.7	5.4	40	18	0	40	$4.3\frac{1}{2}$	17	17

## PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND ENGLAND



The above chart is based on the statistics given on the next two pages. The solid line shows the average prices of eight fabrics in the New Vork market. The broken line shows the average prices of eight fabrics of approximately the same average construction in the Manchester market.

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND ENGLAND

(Compiled by the Bureau of Business Research of the Graduate School of Business Administration of Harvard University)

The New York prices in the comparisons given below are the average prices of eight fabrics with an average construction of  $61 \times 61$ , average linear yards per pound 5.4, average square yards per pound 5.00, and average number of yarn 20.4.

The English prices are the average prices of eight fabrics with an average construction of  $63 \times 60$ , average linear yards per pound 5.0, average square yards per pound 5.08, and

average number of yarn 29.3.

a verage number of varia 29.3.			
Date	(cents per pound)	Manchester, England. At current exchange— demand ster- ling (cents per pound)	Per cent, that English prices at current exchange were above or below New York prices
1010			
January 2	. 65.01	75.80	15' ¿ above
0	. 64.60	74.00	15 "
16	. 59.65	72.70	22 "
23		66.80	17
	57.26		
February 6	. 53.01	63.20	17 "
•	53.28	63.10	18 "
13	50.04	61.80	21
. 20	. 50.07	60.80	21 "
27	50.00	00.20	10
March 6	49.52	58.71	10
13	50.00	57.03	15
20	51.19	55-52	8
27	50.58	50.98	1 ,,
April 3	50.60	52.25	.3
IO	52.46	53-35	2
17	. 55.19	53.86	2 below
24	57.00	55.20	3 "
May 1	50-01	55-32	3 8
8 .	60.56	56.92	6 "
15	65.48	57.94	11
20	67.61	59.39	1.2
27	75.94	04-37	15
June 3	79.35	65.78	17 "
10	79.86	65.95	17 "
17 .	78.62	67.78	11 "
24	81.35	69.91	14 "
July 1	84.92		
8		73.14	14 "
	86.87	73.24	16 "
15	90.67	75.67	17 "
22	92.06	74.65	10
20	92.18	75-70	18 "
August 5	. 01.40	75.15	18
12	87.49	73.04	17
10	. 82.50	70.07	15
20	83.77	09.40	17 below
September 2	$8_{3}.6_{7}$	69.59	17
9	. 78.39	07.72	14 "
16	. 78.34	68.00	1.3
23	. 80.63	68.72	15 "
30	85.11	72.18	15 "
October 7	86.75	72.07	17 "
14	89.04	73.23	18 "
21	92.49	74.00	20 "
28	95-35	77.43	10 "
November 4	. 98.76	79.65	10 "
11	. 99.79	78.54	21 "
18	96.67	76.02	20 "
25	07.70	78.81	10 "

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND ENGLAND (continued)

	DATE	New York	Manchester, England. At current exchange— demand ster-	Per cent. that English prices at current exchange were
		pound)	ling (cents per	above or below New York prices
1919				-
December	2	 99.64	79.46	20% below
	9	 102.04	79.88	2.2
	16	 101.00	79.83	21
	23	 103.47	83.14	20 "
	30	 104.32		_
1920	(			
January	6	 107.48	adam.	-
	1,3	 113.31	-	- ''
	20	 114.73	89.20	22
2-1	27	 113.61	87.02	23
February	3	 113.60	81.33	28 "
	10	 111.45	-	- "
	17	 110.02	85.77	2.3
\ Lowal-	24	 110.23	87.24	21
March	2	 107.43	87.46	10
	9	 107.43	93.21	1,3
	16	 111.17	95.61	14 "
	23	 112.73	98.36	13
	30	 113.05	102.04	10 ""
April	6	 113.05	102.49	10 "
	13	 116.37	101.81	1.3
	20	 11().0()	102.36	1.2
	27	 116.00	99.26	14
May	4	 115.70	99.65	1.4
	II	 114.03	98.64	13
	18	 110.51	08.10	11
	25	 107.48	98.41	8 "
June	I	 108.59	100.36	8
	8	 100.31	98.37	10 ""
	15	 107.10	96.34	10 "
	22	 104.65	05.86	8 "
r 1	20	 102.00	93.60	8 "
July	6	 100.00	92.49	7
	1,3	 95.98	91.71	4 "
	20	 92.92	90.68	2
	$27 \dots \dots$	 87.95	87.48	0.5
August	3	 83.26	81.16	2
	10	 79.60	80.21	0.7 above
	17	 76.21	78.24	2 "
	24	 74.18	72.72	1 below
	31	 70.51	72.31	2 above
Septembe		 69.15	71.58	3
	14	 69.98	69.36	o.8 below
	21	 71.40	65.30	8 "
2.4.1	28	 68.95	62.82	9
October	5	 62.86	60.20	4 "
	12	 58.90	57.89	2
	10	 53-95	53.25	1
ΛT 3	26	 51.02	56.20	8 above
zozembe.	2	51.64	56.05	8 "
	0	48.67	53.07	()
	16	 45.74	40.7°	9
	23	42.4I	40.00	10
E) . 7	30	42.49	46.63	10
December	,	 41.68	44.25	0
	14	41.08	42.97	5
	21	41.50	42.42	2
	28	 40.41	41.08	4 "

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND JAPAN

(Compiled by the Bureau of Business Research of the Graduate School of Business Administration of Harvard University)

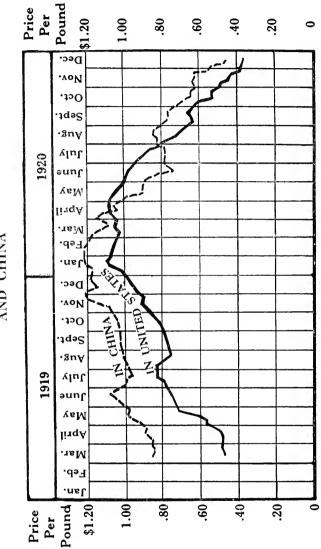
The New York prices in the comparisons given below are the average prices of eight fabrics with an average construction of  $50 \times 55$ , average linear yards per pound 4.63, average square yards per pound 4.41, and average number of yarn 23.8. The Osaka prices are the average prices of eight fabrics with an average construction

of 50×52, average linear yards per pound 4.10, average square yards per pound 4.10,

and average number of varn 23.8.

	New York	Osaka, Japan	
Date		At current exchange—	Per cent, that Japanese prices at current
	(cents per pound)	(cents per pound)	exchange were above or below New York prices
1020			
January 8	104.41	00.87	4.3° below
15	100.24	102.07	5.7
22	100.88	100.70	8.3 "
20	108.14	103.07	4.1
February 5	106.78	103.72	2.0
12	105.24	105.30	.oo above
IQ	104.00	102.87	2.0 below
26	102.85	100.42	3.5 above
March 4	102.85	105.04	2.1
II	104.70	103.56	1.2 below
18	100.49	102.00	3-4
April $I \dots \dots \dots \dots \dots$	107.99	102.01	5.0 "
22	110.37	80.42	27.1
May 13	107.95	74.57	30.0
July 8	93.79	72.51	22.7
15	89.53	72.51	10.0
20	82.35	04.70	21.4
August 5	77.40	06.46	14.1
12	74.34	05.04	11.3
10	71.02	04.00	8.6
26	70.23	64.07	8.8 "
September 2	67.82	64.54	4.8
30	64.02	50.08	21.8 "
October 7	61.02	46.58	23.7
21	52.73	48.45	8.1
28	51.82	53-58	3.3 above
November 4	49.54	54.01	0.0
ΙΙ	47.28	54.84	10.0
25	40.87	50.14	22.7
December 2	40.57	45.85	13.0 "

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND CHINA



The above chart is based on the statistics given on the next two pages. The solid line shows the average prices of four fabrics in the New York market. The broken line shows the average prices of four fabrics of approximately the same average construction in the Shanghai market.

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND CHINA

Compiled by the Bureau of Business Research of the Graduate School of Business Administration of Harvard University)

The New York prices in the comparisons given below are the average prices of four fabrics with an average construction of  $48 \times 49$ , average linear yards per pound 6.08, average square yards per pound 5.49, and average number of yarn 24.4.

The Shanghai prices are the average prices of four fabrics with an average construction of  $64 \times 63$ , average linear yards per pound 4.16, average square yards per pound 4.41,

and average number of yarn 24.8.

			New York	Shanghai	December 1
		Date	(cents per pound)	At current exchange— cables (cents per pound)	Per cent, that Shanghai prices at current exchange were above or below New York prices
1010					
March	13		47.45	86.40	$82^{C}_{0}$ above
viai Cii	20		48.13	85.76	78 "
			48.13	86.66	% 80 "
April	•		48.13	86.11	
три	-				70
	17		50.30	90.03 80.82	79
May	24		53.04		09
nay	8		57.09	91.82	61 "
			57.76	93.90	03
	15		61.14	98.11	00
lune	29		71.28	97.16	30
	19		75.26	108.77	45
July	3 · ·		78.16	100.59	20
	10		79.62	100.25	20
	17	<sub>.</sub> .	83.32	96.86	10
August	7 · ·		84.24	99.50	10
2 . 1			76.34	101.57	33
October	16		81.12	104.88	29
Novembe	r 13		91.48	110.01	20 "
	20		90.30	1 20.05	33 "
December	. 1		94.43	123.30	31 "
	II		96.28	115.67	20 "
	25		98.83	119.35	21
1920					
January	Ι		100.21	118.94	19 "
	8		102.57	117.00	14 "
	15		107.89	1 20. 24	11 "
	22		110.43	121.80	10 "
	20		100.50	121.02	11

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND CHINA (continued)

							New York	Shanghai		
		D	)ATE	:			(cents per pound)	At current exchange— cables (cents per pound)	Shangl at c exchar above	ent. that nai prices urrent nge were or below ork price
1020										
February	5 .						 108.37	122.16	130	above
March	4 .						 103.79	116.32	I 2	**
	II.						 103.40	114.87	ΙI	4.6
	18 .						 105.15	109.16	4	+ 4
	25 .						 105.35	112.62	7	**
April	Ι.						 105.74	115.89	10	**
_	S .						 107.41	111.32	4	
	15 .						 108.78	105.13	3 be	elow
	22 .						 109.55	106.44	3	+4
	20 .						 109.55	103.03	5	
May	6.						 108.58	98.71	9	
•	13.						 106.51	90.50	15	
June	3 -						 100.71	88.77	I 2	* *
	17 .						 98.91	74.85	2.4	4.6
July	Ι.						 93.81	79.93	14	
	8 .						 91.96	79.37	13	4.6
	22 .						 86.12	79.33	7	
	20 .						 82.03	82.22	0.2	above
August	5 .						 78.86	82.80	5	6.4
0	12.						 74.87	84.89	1,3	4.6
	10.						 79.53	84.15	10	**
	26 .						 69.31	82.11	18	+ 4
Septembe:	. 2 .						 64.90	78.01	20	. 6
	ο.						 64.00	77.45	10	4.6
	16.						 66.37	77.10	16	
	30 .						 64.06	74.46	16	
October	7 .						 60.85	68.61	1,3	4.6
	1.1						 54.85	65.71	20	4.6
	2 I .						 53.31	64.87	22	. 6
	28 .						 51.32	63.51	24	
November							 48.76	64.64	33	4.6
	11.						 45.13	63.49	41	4.6
	18 .						 42.78	62.00	47	4.6
	25 .						 39.43	56.96	45	4.6
December							 39.70	52.35	32	46

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND INDIA

(Compiled by the Bureau of Business Research of the Graduate School of Business Administration of Harvard University)

The New York prices in the comparisons given below are the average prices of six fabrics with an average construction of  $61\times62$ , average linear yards per pound 4.4, average square yards per pound 4.6, and average number of yarn 27.5.

The Calcutta prices are the average prices of six fabrics with an average construction of  $69 \times 64$ , average linear yards per pound 4.3, average square yards per pound 4.4, and

average number of yarn 27.8.

		DATE	New York (cents per	Calcutta At current exchange— cables	Per cent, that Calcutta prices at current exchange were above or below
			pound)	(cents per pound)	New York price
				1	
1919			6		(:1
January	9		 04.01	75.14	17 above
	16		 58.61	75.14	20
	23		 57.39	74.11	-9
February	30		 53-42	74.11	39 "
rebruary	6		 52.87	71.91	36 "
	13		 50.85	70.88	39
	20		 49.82	69.35	39
March	27		 50.80	69.35	37 "
March	6		 40.19	68.33	39
	13		 50.20	68.33	36 "
	20		 50.68	68.33	33
V #11	27		 50.51	70.74	40
April	3		 50.33	70.74	41
	10		 52.53	70.74	33
	17		 55-43	70.74	28
	24		 56.91	72-77	28
May	1		 59.84	74.80	25
	8		 60.23	74.80	24
	15		 04.52	74.80	10
	22		 71.65	74.80	+
*	20		 79.24	74.80	6 below
June	5	$\bullet  \bullet  \bullet  \bullet  \bullet  \bullet$	 79.70	74.80	7
	1.2	$\cdot  \cdot  \cdot  \cdot  \cdot  \cdot  \cdot$	 78.84	74.80	5
	10		 79.02	86.90	10 above
T 1	20		 83.77	88.30	5
July	3		 86.87	89.02	2
	10		 88.58	90.72	2
	17		 91.45	93.18	2
	2.4		 91.84	93.18	I ''
	3 L		 91.65	88.73	3 below
August	7		 88.79	88.73	No difference
	14		 85.61	88.73	4℃ above
	2 I		 81.06	94.29	10 "
	28		 83.00	93.18	1.2
September	4		 80.31	04.05	17
	Ι Ι		 77.40	95.03	23
	18		 78.99	94.74	20 ''
_	25		 82.31	92.85	1,3
October	9		 86.64	94.68	9 "'
	16		 91.02	98.64	8 "
	23		 91.93	97.31	6 "
	30		 95.04	99.34	5 "
November	6		 98.62	98.27	ı below
	13		 97.87	100.60	3 above
	20		 94.35	100.60	7 ''
	27		08.04	100.44	2 "

### PRICES OF COTTON GRAY CLOTH IN THE UNITED STATES AND INDIA (continued)

			New York	Calcutta	
	DATE			At current exchange— cables	Per cent. that Calcutta prices at current exchange were
			(cents per pound)	(cents per pound)	above or below New York prices
1919					
December	1 4 · · · · · · · · · · · · · · · · · ·		101.12	102.27	1 c above
	18		102.49	102.15	No difference
1920			102.49	101.35	170 below
January	8		110.16	103.95	6 "
	15		115.27	101.55	I 2
	22		116.00	100.41	13 "
February	5		112.77	100.41	II "
	12		10.65	106.12 111.83	4 .
	19		107.91	111.03	4 above
3.6	26		104.33	103.84	5 below
March	4		103.56	103.84	No difference
	II		106.79	107.26	"
	18		109.04	98.13	10% below
	25		110.52	105.55	4 "
April	8		110.91	108.69	2
•	15		112.02	113.25	1 above 2 below
	22		111.77	108.60	3 "
3.6	29		111.56	105.67	5 "
May	6		111.20	102.81	5 "
	13		100.00	100.47	8 "
	20		105.33	101.15	4 "
June	27		102.74	99.00	4 "
Jame	3		103.62	103.15	0.4
	17		104.68	100.54	4
	24		98.60	92.48 90.22	9 " 8 "
July	I		95.66	90.22	6 "
	8		92.37	91.29	ı "
	15		88.79	91.29	3 above
	22		85.98	89.89	5 "
August	29		79.08	88.33	I 2
August	5		76.42	88.33	16 "
	10		72.97	86.62	19
	26		70.45 69.58	86.62 81.21	23
September	2		66.22	81.81	2.3
	9		65.20	83.00	27 "
	16		67.95	83.00	22 "
	23		67.33	80.03	19 "
October	30		63.64	77.81	22 "
October	7	1	58.06	71.77	24 "
November	4		53.68	68.30	27 "
			49.48	67.44	30
rovember	II				
rovember	18		46.05	69.52	51 "
	11		42.82	69.52	62 "
December	18				62 "

### EXPORTS OF COTTON CLOTH BY GREAT BRITAIN

Returns through 1919 are in Running Vards, Returns for 1920 are in Square Yards (From statistics compiled by British Board of Trade)

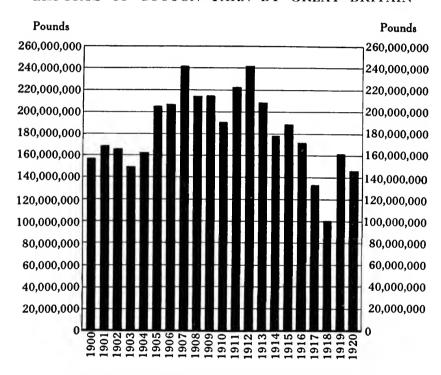
	1161	1012	1013	101	1015	9101	1917	8161	0161	1920
January	568,228,500	550,603,500	·	088,105,100	340,441,800	424,103,500	400,484,000	400,11,000		
February	\$ 20,007,500	180,520,100		583.451,000	304.452,300	410,784,500	330,124,800	363,002,300		
March	636,198,100	622,341,100	500,005,000	590,375,000	352,435,100	124.730.500	4.44.327,500	302,075,300	105.863,000	
April	521,003,600	524,131,000		5.31,908.600	380,745,800	100,117,000	347.140,500	392,365,900		
May	544,544,700	560,700,600	_	572,013,100	473.753.000	504,837,600	473,567,300	403,190,000		
June	517,112,300	\$19,864,000		100,501,000	124,040,100	500,831,600	305,591,200	363,246,500		
July	160,865,700	635,360,900	_	028.770,100	538,617,400	470,000,200	409,087,000	288,647.700		
August	577.896,500	641,782,200		313.074,600	418,704,300	424,317,100	160,083,000	267,619,600		
September	528,367,400	569,622,300		374,358,500	409,808,000	401,007.500	420,448,300	247,790,000		
October	663,504,300	666,185,300	_	370,711,500	307,322,200	380,228,000	382,821,100	220,110,200		
November	580,681,500	568,045,600		300,000,000	348,847,200	310,500,000	301,487,100	232.762,900		
December	517,203,800	554,370,000		276,015,100	374,209,300	100,300,500	352,911,500	207,448,900		248,045,800
Total	6,653,013,000	0,912,625,800	7,075.548.400	5.735.854.700	4.748.904,600	5,254,503,900	4.079,076,900	4.079.076.900 3,695,772,100	3.528,756,500	1,436,557,500

### EXPORTS OF COTTON YARN BY GREAT BRITAIN Expressed in Pounds

(From statistics compiled by British Board of Trade)

	1161	1912	1013	1014	5101	6161	7161	5161	0161	1920
	19,530,100	20,633,300	10,003,300	19,056,000	13,830,300	13,634,300	13,773,700	8,757,400	0.913,400	16,458,000
	22,119,800	23,701,500	17,212,600	10.524,300	15,553,100	13,416,200	10,885,100	9,929,900	12,994,200	10,072,200
	17,543,500	19,005.500	18,578,600	18,092,500	19,000,300	13,057,500	8,459,000	cot.711.7	16,005,500	11,100,200
	18,051,000	20,890,930	17,776.700	20,234,300	10,348,500	17,202,000	10,423,800	8,914,200	16,056,000	14,280,000
	002,626,91	008,190,01	16,086,700	17,233,000	CCO,008,8I	17.004.300	12,206,300	10,745,900	13,981,300	14,800,700
	14,852,100	20,623,800	16,620,200	19.800,300	13,052,200	14,080,500	14,073,400	0.030,000	13,626,700	15,320,800
	10,288,800	20,870,200	15,993,100	8,046.800	13,429,500	15.011,800	10,787,300	8,306,700	15,626,000	12,023,700
	15.828,000	18,900,500	15.734.400	0.608,100	16,205,700	14,254,100	0.424,200	0,802,300	12,645,000	11,588,500
	21,863,200	22,515,500	10.050,100	8,018,500	13,711,300	13,541,200	10,454,900	7,402,100	14,252,200	10,376,500
	20,706,100	18,025,200	18,2,17,000	0,547,000	14, 405, 100	12,382,500	8,457,000	0.128,200	13,501,000	11,002,000
:	18,631,300	18,314,300	001,702,71	0,00,000,0	14,835,400	11,225,200	8,010,000	8.730,000	14,893,700	7.710,700
	223.857.000	243,054,300	210,175,500	178,527,800	188,178,700	172,102,500	133.153.400	101.703.700	162,605,500	117.512.000

### EXPORTS OF COTTON YARN BY GREAT BRITAIN



The above bar diagram is based on the statistics given on the next page. It shows the exports of cotton yarn by Great Britain. The statistics are in terms of pounds. The years are calendar years. The statistics were compiled by the British Board of Trade

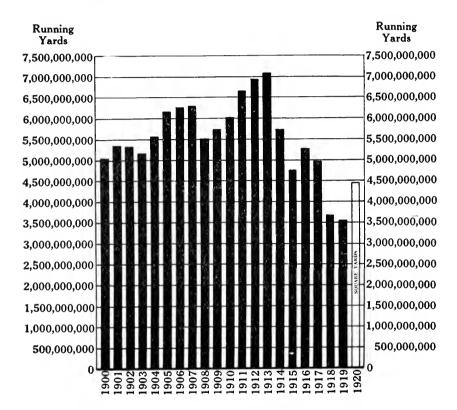
### EXPORTS OF COTTON YARN BY GREAT BRITAIN

### Expressed in Pounds

### (From statistics compiled by the British Board of Trade)

Year	Exports
1000	158,272,900
1001	100,658,000
1002	100,360,900
1903	150,758,100
1004	163,901,400
1905	205,100,500
1000	207,378,700
1007	241,070,700
1908	214,702,200
1000	215,223,400
1910	191,694,500
1011	223,857,600
1012	243,954,300
1013	210,175,500
1914	178,527,800
1915	188,178,700
1916	172,192,800
1917	133,153,400
1918	101,703,700
1919	162,665,800
1920	147,542,900

### EXPORTS OF COTTON CLOTH BY GREAT BRITAIN



The above bar diagram is based on the statistics given on the next page. It shows the exports of cotton cloth in the piece by Great Britain. The statistics for 1900 to 1919 inclusive are in running yards; those for 1920 are in square yards. The years are calendar years. The statistics were compiled by the British Board of Trade.

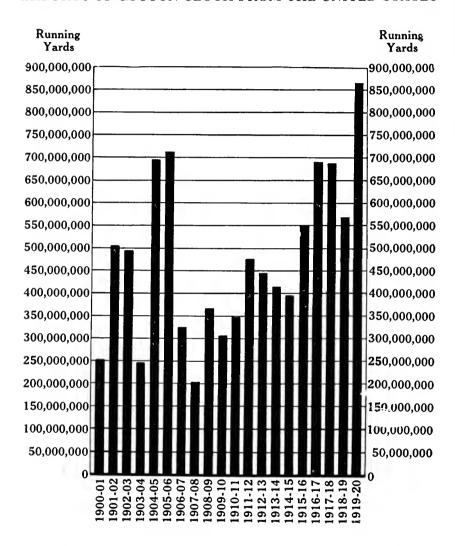
### EXPORTS OF COTTON CLOTH BY GREAT BRITAIN

(The statistics for 1900 to 1919 inclusive are in running yards; those for 1920 are in square yards)

### (From statistics compiled by the British Board of Trade)

Year											Exports
1000											5,031,727,000
1001											5,364,600,000
1902											5,331,552,200
1903											5,157,315,500
1001											5,501,822,000
1905											6,196,783,000
1906											6,260,771,000
1007											6,207,707,400
1008											5,530,808,900
1009											5,722,158,500
1010											6,018,454,140
1011											6,653,613,000
1912											6,912,625,800
1913											7,075,548,400
1014											5,735,854,700
1915											4,745,734,600
1916											5,255,503,900
1917											4,979,076,900
1918											3,605,772,100
1919											3,528,756,600
1920											4,436,557,500

### EXPORTS OF COTTON CLOTH FROM THE UNITED STATES



The above bar diagram is based on the statistics given on the next page. It shows the exports of cotton cloth in the piece, expressed in running yards, from the United States, during years ending June 30th. The statistics were compiled by the United States Department of Commerce.

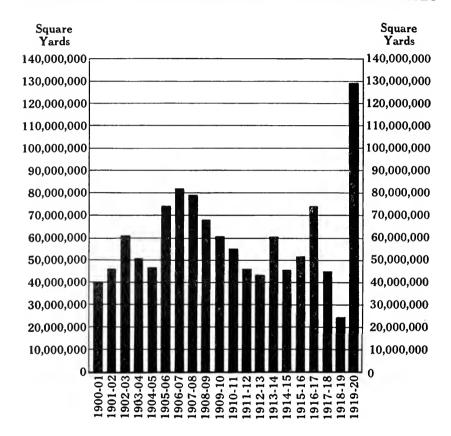
### EXPORTS OF COTTON CLOTH FROM THE UNITED STATES DURING THE YEARS ENDING JUNE 30TH

### In Terms of Running Yards

(From statistics compiled by the United States Department of Commerce)

Year															Exports
1900-1901															251,503,351
1901-1902															504,773,813
1902-1903															495,379,197
1903-1904															247,380,737
1904-1905															694,500,715
1905-1906															711,493,054
1906-1907															326,340,329
1907-1908															205,994,812
1908-1909															307,631,542
1909-1910															300,911,304
1910-1911															346,590,169
1911-1912															476,778,499
1912-1913															444,729,241
1913-1914															414,860,013
1914-1915															396,944,195
1915-1916								٠							550,571,720
1916-1917															690,193,896
1917-1918															684,927,075
1918-1919															570,302,799
1919-1920															867,292,647

### IMPORTS OF COTTON CLOTH INTO THE UNITED STATES



The above bar diagram is based on the statistics given on the next page. It shows the imports of cotton cloth in the piece, expressed in square yards, into the United States during years ending June 30. The statistics were compiled by the United States Department of Commerce.

### IMPORTS OF COTTON CLOTH INTO THE UNITED STATES DURING YEARS ENDING JUNE 30

### In Terms of Square Yards

### (From statistics compiled by the United States Department of Commerce)

Year																	Imports
1900-1901																	40,763,027
1901-1902		v															46,212,325
1902-1903																	61,320,192
1903-1904																	51,448,203
1904-1905																	47,519,370
1905-1906																	74,657,229
1906-1907																	82,640,331
1907-1908																	79,485,524
1908-1909																	68,376,608
1909-1910																	61,947,101
1910-1911																	55,535,160
1911-1912																	46,710,473
1912-1913																	43,637,361
1913-1914																	61,633,329
1914-1915																	46,799,419
1915-1916															٠		52,446,385
1916-1917																	74,012,978
1917-1918																	45,015,423
1918-1919																	24,474,101
1919-1920																	129,185,989

### EMPORTS OF MANUFACTURES OF COTTON INTO THE UNITED STATES, BY CLASSES OF GOODS, FOR CALENDAR YEARS SINCE 1911

### In terms of quantity

(From statistics compiled by United States Department of Commerce)

This table embraces only those classes of goods which can be expressed in units of quantity. It does not include, necessarily, other classes which cannot be so expressed. The table on imports expressed in terms of value includes all the imports of manufactures of cotton

the control of the co		dva en color		The CITY of The Ci	sonnon.	dur ene uni	outs of ma	nuiactures	or cotton.	
	1161	1912	1913	†161	1015	9161	1617	8161	6161	1920
Cotton thread and yarn: Thread and carded yarns, warps, or warp yarn, on beams, in skeins, etc. (Ibs.) Swool thread and creeket Jacobian and	7,079,150		6,436,613	7.631.446 6.436.613 6.650.146 6.041.854	6.041,854	9,030.434	9,281,264	3.936,481	3,861,968	3,861,968 10,629,645
embroidery cotton (100 yds.)	1	1	1	ı	1	ı	ł	1	11.938,565	83,331,972
Unbleached (sq. yds.) Bleached (sq. yds.) Dwol colored stained tointed or	3,856,389	4,370,131	3,666,363	3,728,821	4,072.746	11,533,590	10,807,736	6,587,809	19,732,441	50,408,634
printed (sq. yds.) Dyed in the piece (sq. yds.) Printed (sq. yds.) All other (sq. yds.)	33.762,041	29,445,517	29,270,786	11,052,024	25,047,452	24,469,857 5,011,711 10,857,385	27,153,613 4,453,755 10,328,006	11,866,773 2,606,832 5,839,319	11,577,432 3,725,381 5,283,310	\$8,746,021 13,611,021 14,098,894
Total cloths (sq. yds.)	52,031,130	45.497.927	46,563,568	16,563,568 62,272,013	42,759,670	66,400,638	65,296,802	32,839,509	1.744,400	140.788.365
thereof (except wearing apparel): Embroideries, including edgings, insertings, and galloons (vds.)	ŀ	ı								
Lace window curtains (sq. yds.) Laces and lace articles, including lace edings, insertings, and calloons	1	1	l I	1 1	1 1	1 1	1 1	1 1	7,586,004	24,889,080
Hand-made (yds.) All other (yds.) Plushes, velvets, cordutovs and other pile	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	2,680,254	5,077,856
fabrics (sq. yds.) Tapestries and Jacquard figured upholstery	5.327,686	4,947,085	5,071,153	3,484.603	2,996,729	4.227,528	2,219,711	357,603	433,335	1,038,564
goods (sq. yds.) Waste or flocks (lbs.) Wearing apparel:	49,258,534	49,258,534 37,541,144	38,195,858	19,139,522	16,003,487	29,915,740	15,038,754	- 1,207,336	1,244,506	9,280,503
Stockings, hose and half hose (doz.	ı	ı	ı	ı	ı		1	ı	181,230	386,414
pairs) All other knit goods (doz.)	2,385,428	2,322,951	2,048,118	2,017,390	848,349	57,027	51,307	016,310	65,055	228,285

NOTE.—Where no figures are given for the earlier years (as for Spool Thread and Crochet, Darning and Embroidery Cotton prior to 1919) the items were either not compiled or not separately classified in those years. If compiled, they were grouped with other items shown in the table. It should not be assumed that there were no imports of such items because no figures were given for these items separately.

### IMPORTS OF MANUFACTURES OF COTTON INTO THE UNITED STATES, BY CLASSES OF GOODS, FOR CALENDAR YEARS SINCE 1911

		(From sta	tistics compile	In terms of value  From statistics conniled by United States Department of Commerce)	value tes Departme	nt of Commer	(e)			
	1101	1013	1913	1.101	1015	9161	1017	1018	1010	1920
Cotton thread and yarn: Thread and carded yarns, warps, or warp yarns, on		6	s S	,	o u e	50 27 27 20 24	2000	S. S	05. 150.48	901.811.558
beams, in skeins, etc. Spool thread and crochet, darning, and embroidery	41,230,305	\$1,500°,14	54+470*50*	0.50.000,1+0	000010100	factoriette	F-03000			
Clother	ı	1	1	1	1	I	ı	ı	1,932,538	3.545.891
ached	424,354 2,367,580	499,369	472,527	484,205 2,056,142	393,411	1,203,015	1,664.726	2,223,062	5,102,862	13.748.108
Dyed, colored, stained, painted, or printed	5.761,229	5,108,243	194,748,8	7.518,617	4,210,123	1	1	1 1 1	1	1 8 2 3 7 9 7
Dyed in the piece	1 1	1 1	1 1	f t	· ·	1,020,000	1,072,100	946,538	1,050,703	0.000,191
All other	1	1 3		911111111111111111111111111111111111111	£. 6.46.33	1,727,730	2,134,523	2,041,265	2,020,001	5,959,054
Handkerchiefs or mufflers Lates, embroideries, etc., and articles made thereof (ex-	\$5.53,172	47,010,190 14,00,814	482,371	331,272	245.722	502,154	1,287,855	1,000,890	1,505,277	3.607.779
cept wearing appared) Product of the Philippine Is-	30,005,819	1	ı	ı	1	I	1	ı	1	1
lands Embroideries including edge-	ı	r	1	1	ı	I	1	1	05,040	152,07.3
ings, insertings, and galloons Lace window-curtains 1 nees and bee articles includ-	1 1	13,480,190	11,620,092 750,302	7,600,830	7,188,800	4.947.927	300,007	501.725	0.37,753	2,501,302
ing lace edgings, insertings, and galloons:										
Hand-made	t i	1,144,673	431,280	114,218	41,770	440,870	774.087	305,340	7,702,408	1,021,173
Nets or nettings	1	776,737	1,368,759	1,327,870	1,171,024	2,777,470	1,552,557	1,014,140	2,400,628	100,040,1
All other	i 1	91,749	2,572,036	1,1,38,484	688,452	1,239,858	1,786,553	900,538	1,858,320	5.507.801
Total laces, etc	\$30,005,819	\$38,000,887	\$34,231,253	\$20,378,288	\$10.753,031	\$20,451,984	\$12.905.404	\$5,872.428	\$13,000,110	\$24,300,149
other pile fabrics Tapestries and Jacquard figured	2,+28,80+	2,788,053	2,527,152	1,707.700	1,418,620	2,018,59.3	1,511,141	354,350	503,147	1,115,295
upholstery goods Waste or flocks	2,578,457	1,750,093	1,759,803	072,157	080,535	1,471,051	035.487	94,123	126,550	3.355,811
Wearing appearer. Product of the Philippine 1s. Knit Goods:	1	1	1	1	ı	ı	1	1	2.796.634	7,349,452
Gloves Stocking base buff base	207, 666		, (110 )	02.50.50.50	0000.1112	135.721	118.103	131.003	305.854	1,345,637
All other knit goods Total knit goods	520,059	4,303,822	915,686	3,271,804	1,052,123	030,174	460,100	1,156,700	370,778	186,020
All other wearing appared All other manufactures of	3,410,892	5.450,025	4,040,072	1,501,147	1,182,008	1,707,325	1,030,325 8,035,832	2,516,00,3	1,638,534	3.445.460
Total manufactures of cotton	\$65,804,904	\$07,078,226	\$65,350,542	\$60,312,013	\$42,172,291	\$53.751.310	\$53,825,208	\$30,505,205	\$52,040,21S	\$137,431,814

### EXPORTS OF MANUFACTURES OF COTTON FROM THE UNITED STATES, BY CLASSES OF GOODS, FOR CALENDAR YEARS SINCE 1911

### In terms of quantity

(From statistics compiled by United States Department of Commerce)

This table embraces only those classes of goods which can be expressed in units of quantity. It does not include, necessarily, other classes which cannot be so expressed. The table on exports expressed in terms of value includes all the exports of manufactures of cotton.

	1101	1912	1913	1914	1015	9101	2101	8161	6101	1920
Cloths (running yards):										
Duck: Unbleached	ı	,	,	1	ı	ı	8,398,833	5,007,520	0,128,503	13,103,485
Bleached	1	1	ı	ı	ı	ı	2,458,643	2,254,458	4,269,404	4.849.554
Colored	1	1	ı	1	ı	ı	1,493,547	731,388	1,301,202	1.570,616
All other Cloths:										
Unbleached	214,154,730	214,154,730 221,160,846 245,916,185 125,650,257 209,008,108 161,057,402 125,319,773	245,016,185	125,650,257	209,008,108	161,057.402	125,319,773		73.436.891 142.885,303 138.358.072	138,358,072
Bleached	32,212,623	43,322,108	40,430,266	39,021,824	69.014.986	86,633,815	143,198,426		99,227,003 126,340,050 184,415,527	184,415,527
Colored	163,832,848	163,832,848 199,770,172 180,330,801	180,330,801	161,805,808	ı	1	,	ı	1	1
Printed	I	ı	ı	ı	08,181,200		142,506,810 183,295,050 139,768,162 137,665,935	139,768,162	137.665.935	159,132,852
Dyed in the piece	ı	1	ı	ı	38,740,820	48,286,707		133.174.426	105,419,979 133.174,426 156,051,800	178.484.420
Dyed in the yarn	ı	ı	ı	ı	101,503,188	101,503,188 , 181,771,162	195,037,632	90,484,726	105,304,039	138,824,996
Total cloths	410,200,201 464,253,126 466,677,252 326,477,880 518,338,302 620,255,896 764,621,802 544,174,574 683,045,326 818,820,522	464,253,126	166,677,252	326,477,889	518,338,302	620,255,896	764,621,892	544.174.574	683,045,326	818,820,522
Mill Waste (pounds)	51,855.853	74,900,010	77,059,287	58,750,031	44.780.174	44,780,174 47,420,205	62,250,352	46,868.332	57,317,920	57.877,150
Rags (except paper stock) (lbs.)	ı	1	10,325,703	010,747,01	5,810,034	2,661,566	4,075,111	5,024,629	6,182,533	6,817,037
Hosiery (dozen pairs)	ı	ı	ı	ı	ı	1	1	5.574,343	0,477,338	11.575,655
Yarn (pounds)	1	1	1	1	1	1	1	13,355,800	20,690,124	24,099,399

Note.—Where no figures are given for the earlier years (as for Unbleached, Bleached, and Colored Duck prior to 1017) the items were either not compiled or not sepaclassified in those years. If compiled, they were grouped with other items shown in the table. It should not be assumed that there were no exports of such items because no figures are given for these items separately. rately classified in those years.

# EXPORTS OF MANUFACTURES OF COTTON FROM THE UNITED STATES, BY CLASSES OF GOODS, FOR CALENDAR YEARS SINCE 1911

In terms of value

(From statistics compiled by United States Department of Commerce)

	1101	1012	1913	1914	1915	9161	161	8161	6161	1920
Blankets and comforts (Totals: Truck	1	ı	1	t	1	ı	1	\$2,498.163	\$3,551,511	\$5,196,387
Unbleached Challed Bleached Colored All other Colorled	1 1 1	1 1 1	1 1 1	( 1 1	LES	1 1 3	\$4,255,424 1,002,157 471,781	3,430,806 1,234,330 312,967	7,469,640 3,037,108 718,083	10,755,953 2,984,248 882,717
Unbleached Reached Colored Printed Printed Dyed in the piece	\$15,230,303 2,339,000 10,710,728	\$14,942,869 3,350,272 12,556,514	\$17,093,119 3,186,148 11,978,215	\$0,377,464 3,250,848 II,001,287	\$17,631,374 4,822,465 5,646,294 3,360,598 7,272,941	\$16,780,683 7,791,565 10,156,865 5,213,038 18,101,799	11,787,698 17,661,784 18,559,148 15,460,989 26,281,686	11,830,027 19,090,980 21,628,277 30,073,042 19,918,898	23,591,461 26,213,748 23,205,902 40,605,903 27,095,972	32,028,971 50,872,284 38,588,742 58,854,401 43,261,762
Total cloths	\$28,280,031	\$30,858,655	\$32,257,482	\$23,635,599	\$38,733,582	\$58,044,850	\$95,480,667	\$107,519,333	\$95,480,667 \$107,519,333 \$151,907,817 \$238,229,282	\$238,229,282
Laces and embroideries Mill waste Rags (except paper stock) . Thread, sewing, crochet, etc.	3,371,059	4,070,240	198,462 4,850,341 517,154	264,294 3,813,688 401,297	382,443 3,051,899 227,608	771.742 4,894,771 180,395	1,614,299 9,005,446 245,419	1,569,322 9,488,664 342,419 2,824,776	I,731,675 I2,4I1,704 SI5,754 4,367,762	1,629,409 12,308,596 041,557 4,471,617
Wearing apparel: Collars and cuffs Corsets Knit goods	1,720,704	2,251,025	2,282,780	I,882,445 6,423,715	1,937,742	2,294,055	1,552,161	329,227 1,923,078	771,219 2,880,858	816,142
Hosiery Underwear All other knit goods	111					1 1 1	1 1 1	13,258,474 2,897,486	26,882,566 8,602,293	37,879,655 14,067,839
All other wearing appared For men and boys For women and children Yarn All other	6,020,650	7,902,101 - 606,197 6,762,670	6,172,376 - 745,913 5,800,528	6,438,521	3,610,912	12,072,010 - 5,045,815 22,717,212	10,521,324 - 6,583,081 18,807,530	ပ်က်∞် ၌	i i i	17,724,523 17,724,523 4,542,235 20,014,949 38,403,121
Total manufactures of cotton	\$45,080,591	\$2	85	\$ <del>\$</del>	\$95,833,456	\$95.833.450 \$120.340.571 \$158,81.816 \$181,020,456 \$273.115,704 \$402,070.047	\$158,818,810	\$181,020,486	\$273,115.704	\$402,070,647

NOTE.—Where no figures are given for the earlier years (as for Blankets and Comforts for the years prior to 1918) the items were either not compiled, or not separately classified in those years. If compiled, they were grouped with other items shown in the table. It should not be assumed that there were no exports of such items because no figures are given for these items separately.

Conversely, figures for certain classes of goods (as for All Other Cloths, Colored, after 1914) are discontinued when this classification is broken up into several sub-classifications, All Other Cloths, Colored, being subdivided into Printed, Dyed in the Piece, and Dyed in the Yarn).

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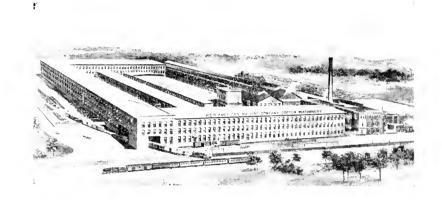
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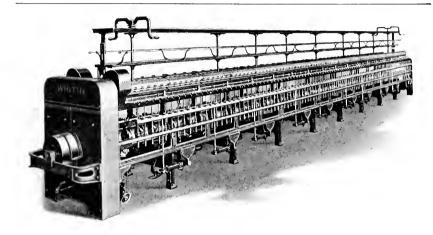
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Revolving Flat Cards Derby Doublers
Roving Frames
Spinning Frames Spoolers Twisters

Special Spinning Frames

#### WOOLEN MACHINERY

Card Feeds Full Roller Cards Condensers Wool Spinning Frames

#### WORSTED MACHINERY

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BALLING-MACHINES
REELS BANDING-MACHINES

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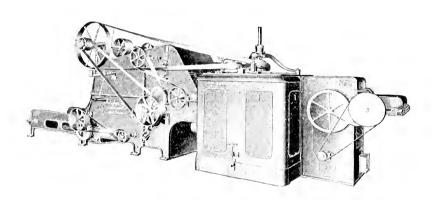
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Biddeford

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Warpers Twisters Winders Slashers Spoolers

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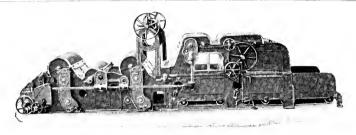
Revolving Creels Slubbing Winders Gill Boxes Drawing Boxes Dandy Rovers Cone Rovers

Spinning Twisting Jack Spoolers Warpers Winders Slashers

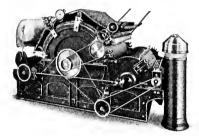
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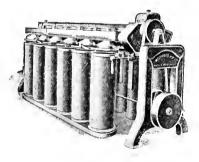
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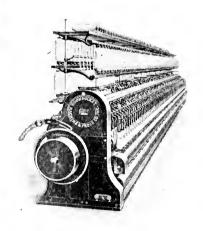
BREAKER PICKER



REVOLVING TOP FLAT CARD



DRAWING FRAME



ROVING FRAME

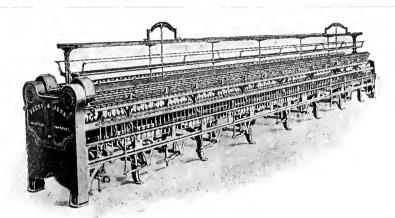
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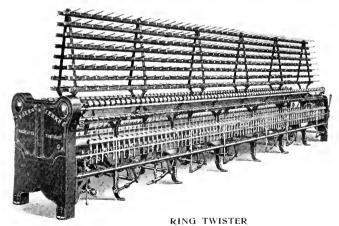
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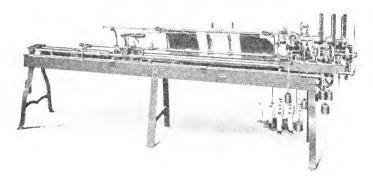
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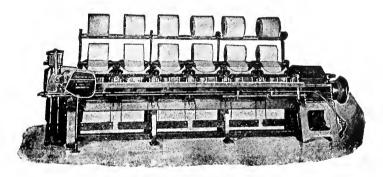
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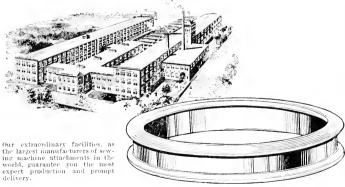
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In standard types of design:

Plate Holders (with Rust Resisting Finish) Cast Iron Holders and Aluminum Holders.

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Made of a special grade heddle wire, are always uniform—free from burrs, accurate in design. In addition to our many standard designs we are prepared to make them from your own specifications. A comparative test will prove their superiority.



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THE finest tempered and most durable travelers that skilled workmanship and latest improved machinery can make, are our product. Uniform temper ensures even running spinning. They

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Quality guaranteed.



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1-WEIGHS 1 GRAIN



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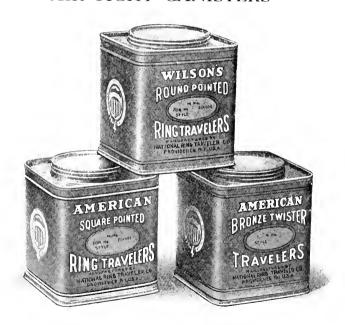
THE BOWEN-WILSON ROUND POINTED TRAVELER
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# Patented AIR-TIGHT CANISTERS



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# WINDING MACHINES

for winding filling for broad and narrow looms
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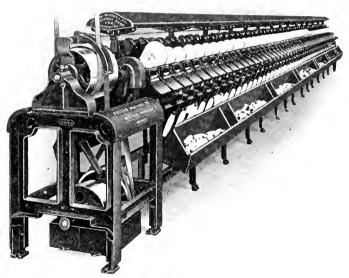
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Cone Winding and Tube Winding Machines, open wind or precise wind, any length of traverse. Drawing supply from cop, bobbin or spool.

Skein Winding—winding cotton, wool or worsted yarn from swifts or runners to tube or cone.

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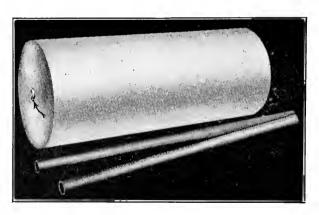


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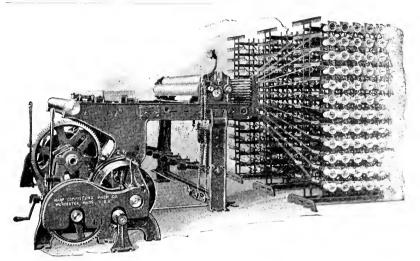


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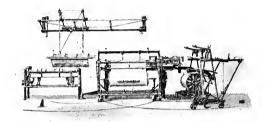
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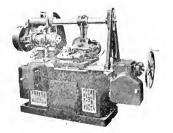


A machine that will produce in ten hours as much work as can be done by fifteen drawing-in hands, accurate to the last degree, a labor saver and dividend payer.

Warp Tying Machine-Model E



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No. 12 Gear Hobbing Machine A portable machine, for tyingin behind the loom. It handles a wide range of work such as ducks, tire fabrics, towellings, damasks, crochet and satin quilts, double beam work, blankets, corduroys, fancy worsteds, velvet, plush, tapestry. Reduces tying-in or twisting-in cost and idle loom time.

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TRADE-MARK REG. U. S. PAT. OFF.

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A Northrop loom weave room needs but 25 to 50 per cent. as many weavers as with common looms;

The Northrop loom saves 50 to 75 per cent. of the labor cost of weaving;

It goes far towards replacing the shortage in weave room production by its capacity to be operated without any weavers at all during the noon hour and a corresponding time night or morning;

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Bear in mind that the added saving in making high-priced cloth soon pays the increased cost of the looms compared with pre-war prices.

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Increase Production
Increase number of looms per weaver
Decrease Seconds
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The decrease in immigration plus the tremendous loss in man-power during the war will make the automatic loom a necessity.

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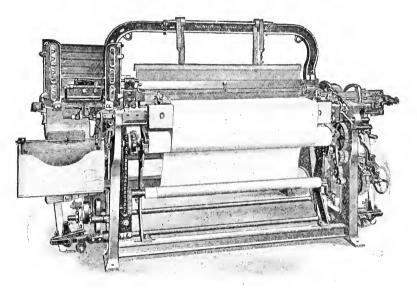
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Weaving Machinery Specialists

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We specialize in the design and manufacture of

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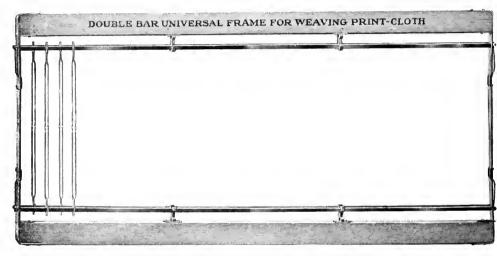
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The Universal Frame is used in hundreds upon hundreds of Textile Mills. Why? Because it is built for service—for efficiency—for durability. It is built for real economy. You can have the Universal Frame built to fit the peculiar conditions of your mill and your product.

## COTTON, SILK, WORSTED or WOOL There is a Heddle and Frame for the Work

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We are manufacturers of the best *doup heddle* the market ever produced. We are makers of the best finished drop heddles and wires you ever had in your mill.

The "Made in America" cast steel Reed Wire, for all kinds of Reeds, is made in our plant.

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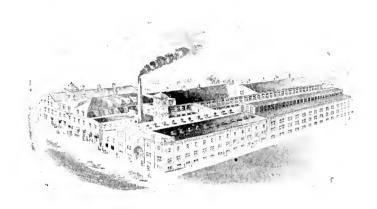
They'll tell you what Steel Heddle Equipment has done for them.

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THE LARGEST MANUFACTURERS OF LOOM HARNESS AND REEDS
IN AMERICA

# Loom Harness and Reeds



COTTON HARNESS for all kinds of Plain and Fancy Weaves in Cotton and Silk Goods.

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We make a specialty of equipping Harness for the

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Speeders, Skewers, Warp Bobbins, Filling Bobbins, Cap Spinning Bobbins, Northrop Loom Bobbins, Twister Bobbins, Twister Spools, Warper Spools, Comber Rolls, Quills, Underclearer Rolls (plain or covered).

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Our "STETSON" patented hand threading shuttle is the best on the market. Repeat orders attest to its merits. Will be pleased to furnish samples upon request.

We also make shuttles for Draper, Stafford, and Crompton & Knowles Looms, and would be glad to furnish samples upon request.

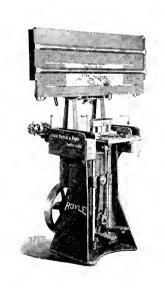
Correspondence solicited on all matters relating to bobbins for Textile Mills.

# JOHN ROYLE & SONS

PATERSON, N.J.

## JACQUARD CARD CUTTERS, LACERS, REPEATERS.

### ROYLE CARD CUTTERS



are necessary for preparing from the design the original set of cards for weaving the pattern. They combine many advantageous features for most dependable returns without wearying strain on the operator. Can be built in any size and index; either pedal drive, belt drive, or electric motor drive. See Circulars Nos. 163 and 187.

The Royle Lacers are for uniting into one continuous string the individual cards of each pattern or design. Simple and automatic in make-up and operation they do not

require any expert attention. Capacity, upwards of 1,800 cards per hour. See Circular No. 162.

The Royle Repeaters are for duplicating the laced set or string of cards when more than one loom is to be run on same pattern. Accurate duplicating is absolutely certain because of special constructural features and the amount of returns much exceeds that from any other method. See Circular No. 161.

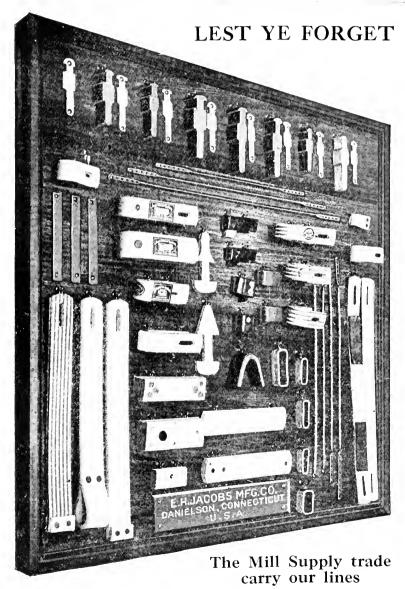
When writing, send sample card.

# E. H. JACOBS MFG. CO.

DANIELSON, CONN.

ESTABLISHED 1869

MANUFACTURERS OF JACOBS LOOM SUPPLIES



# THE J. R. MONTGOMERY COMPANY

WINDSOR LOCKS, CONN.

#### Manufacturers of

#### COTTON WARPS-

In Combed and Carded Yarns made from Peeler, Egyptian and Sea Island Cotton, dyed in all colors, put up on beams, plain or in pattern warps, in chain warps or ball warps, skeins, tubes and cones.

## MERCERIZED COTTON YARNS—

In gassed or ungassed, plain or colors, on jack spools, tubes, cones, skeins, chain or ball warps.

#### **NOVELTY YARNS—**

Bourette, Boucle and Flake Yarns in Silk, Worsted, Cotton or combinations of same.

# EMBROIDERY, HAND KNITTING and MENDING COTTON—

Mercerized or unmercerized, in skeins, balls, boxes and labeled.

## TINSEL—

Gold, Silver, Copper, on spools, plain or Matt.

#### TINSEL THREADS—

Gold, Silver, Copper, Antique, Steel.

## TINSEL METAL CORDS—

For tying candy boxes and Christmas packages.

## TINSEL BRILLIANTS—

In all colors and combinations, two or three ply.

ESTABLISHED 1865

# SCOTT & WILLIAMS

INCORPORATED

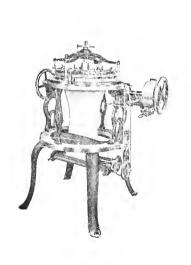
366 BROADWAY, NEW YORK

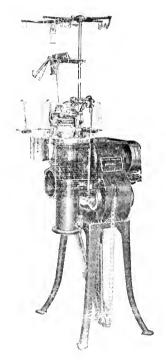
# KNITTING MACHINERY

(Patented)

FOR

# HOSIERY AND UNDERWEAR



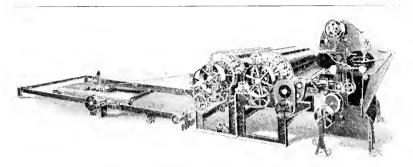


Write for Illustrated Catalog

# SMITH & FURBUSH MACHINE COMPANY

#### BUILDERS OF TEXTILE MACHINERY

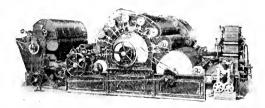
PHILADELPHIA, PA.



#### IMPROVED BLAMIRE LAPPER FELTING OUTFIT

Ask for Circular NA-199

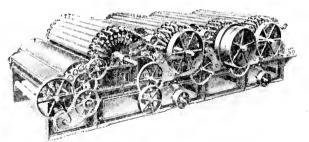
The above cut shows our latest felting equipment. The garnett is built on our sectional unit frame construction with our new blamire lapper. With this blamire it is possible to change the width and weight of felt without stopping the machine.



#### TWO CARD SET FOR COTTON WASTE

Ask for circular NA-186

The set of cards shown is used in making Cotton Waste, Shoddy, Asbestos and other yarns spun on the woolen principle. Single cylinder cards of this type are used for making Absorbent Cotton, Wadding and the better grades of Batts.



#### 4 CYLINDER BREAST GARNETT MACHINE

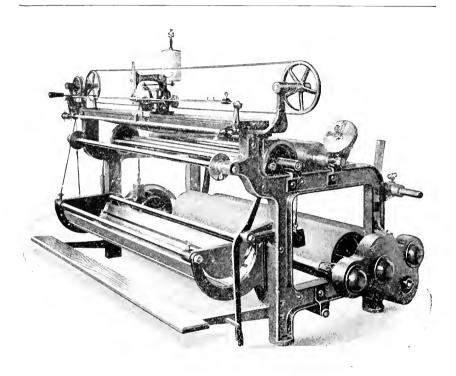
Ask for Circular NA-182

We now build all our garnetts on sectional unit frames. We can supply a complete line of machinery for reworking all kinds of cotton waste.

# DINSMORE MANUFACTURING CO.

SALEM, MASS.

#### SEWING MACHINES

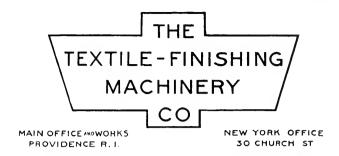


No. 4 Opening, Sewing, and Re-rolling Railway Machine, showing Measuring Roll Dinsmore or Singer Type Head as preferred

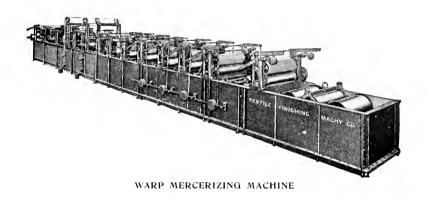
#### RAILWAY AND ROTARY MILL SEWING MACHINES

An absolutely perfect system for joining the ends of cloth to make a continuous piece for all of the various methods of finishing. Thirteen styles.

Send for Illustrated Catalogue.



BLEACHING, DYEING, DRYING, AND FINISHING MACHINERY FOR TEXTILE FABRICS AND WARPS



#### **OUR SPECIALTIES**

Warp Mercerizing Machines

Warp and Piece Dyeing Machines

Warp Indigo Dyeing Machines

Warp Drying Machines

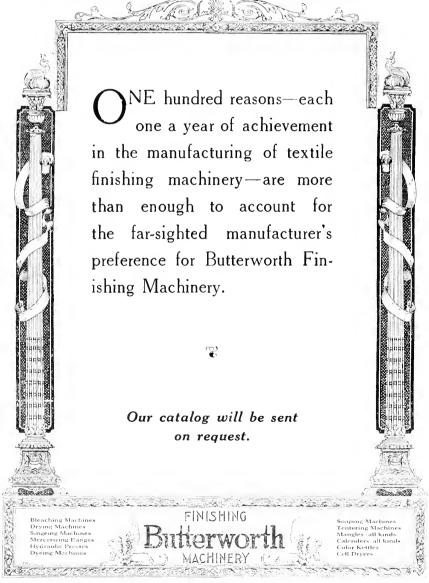
PLANS AND ESTIMATES FOR COMPLETE PLANTS

# H. W. BUTTERWORTH & SONS CO.

Established 1820 PHILADELPHIA

PROVIDENCE OFFICE
TURK'S HEAD BUILDING

Canadian Representative W. J. WESTAWAY COMPANY Hamleton, Ontario, Canada





## for Every Drying Need of the Cotton Manufacturer

"Proctor" Dryers are used in a vast number of mills in every branch of cotton manufacture requiring a drying operation. Whether the mill or dyehouse dries raw stock, yarn or fabric, there is a "Proctor" Dryer of special design suited to its needs.

Every "Proctor" Dryer, in design and performance, reflects the practical value of forty years' experience on the part of its makers. Each type of machine has many users to recommend it for superior drying results—the most satisfactory treatment of the material—the greatest dependability, efficiency and economy of operation.

#### RAW STOCK AND LOOSE MATERIALS

THE "PROCTOR" AUTOMATIC RAW STOCK DRYER—for dyed and bleached cotton, linters, cotton and wool mixtures, rags, hosiery in bulk, and similar materials. Single and triple conveyor types.

#### **YARN**

"PROCTOR" SKEIN YARN DRYERS—Automatic conveyor and truck types for yarn in skeins, tape, braid and similar materials.

THE "PROCTOR" PACKAGE YARN DRYER—for yarn in wound packages as dyed by the Franklin Process Dyeing Machines.

THE "PROCTOR" YARN SCOURING MACHINE.

#### FABRICS—KNIT OR WOVEN

THE "PROCTOR" AUTOMATIC PIECE GOODS DRYER—for woven or knit goods in the piece, turkish toweling, etc.

THE "PROCTOR" TENTER HOUSING—for enclosing and providing air circulation for any tenter, thereby materially increasing its capacity.

#### HOSIERY

THE "PROCTOR" AUTOMATIC BOARDING, DRYING AND STRIP-PING MACHINE—for "boarding" all kinds of stockings and half-hose.

THE "PROCTOR" AUTOMATIC BULK HOSIERY DRYER.

Write for a catalogue on the "Proctor" Dryer suited to your needs.

## PROCTOR & SCHWARTZ, INC.

formerly The Philadelphia Textile Machinery Co.

7TH ST. & TABOR RD., PHILADELPHIA, PA.

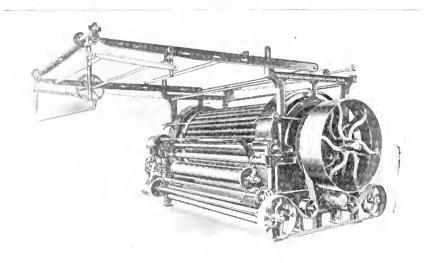
CHICAGO. PROVIDENCE, R.I. CHARLOTTE, N.C. NEW YORK.

Represented in Canada by W. J. Westaway Co., Hamilton, Ontario,

# DAVIS AND FURBER MACHINE CO.

NORTH ANDOVER, MASS.

OLDEST MANUFACTURERS OF PLANETARY NAPPERS IN AMERICA. NAPPERS FOR ALL TEXTILE FABRICS, CARD CLOTHING, CARD GRINDERS, WASTE CARDING-MACHINES, TRANSMISSION MACHINERY, ETC.



Davis and Furber Nappers are the result of long experience in building textile machinery. The various forms are built to give the desired effects on wool, cotton, and knit goods; and maximum production with least power and floor space.

Among the important features are: The double-acting principle, a large number of worker rolls, card clothing made in our own factory and best suited to the goods. The cylinders are built up according to the well-known Grosslein patent, are light yet rigid, and have the most approved oiling device which provides just the right amount with no excess. Our plain journal bearings are proving very satisfactory. If preferred we can furnish ball bearings.

Ask for catalogs, stating what machines are desired.

#### Some few users:

REVOLUTION COTTON MILLS, Greensboro, N.C. ROANOKE MILLS Co., Roanoke Rapids, N.C. BEACON MFG. Co., New Bedford, Mass. ESMOND MILLS, ESMOND, R.I. PEPPERELL MFG. Co., Biddeford, Me. STONECUTTER MILLS Co., Rutherfordton, N.C. HETTRICK MFG. Co., Toledo, Ohio, WM. AYERS & SONS, Philadelphia, Pa.

# B. F. PERKINS & SON, INC.

HOLYOKE, MASS.

MANUFACTURERS OF CALENDER ROLLS, CLOTH TESTERS, EXHAUST AND VENTILATING FANS, ETC.

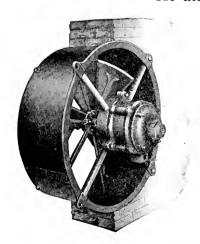
#### CALENDER ROLLS

COTTON — PAPER — HUSK — COMBINATION



"RESISTANT BUT RESILIENT"

# EXHAUST AND VENTILATING FANS for all mill needs



All steel construction.

Built for either pulley or motor drive

Inexpensive to install.

Small power consumption.

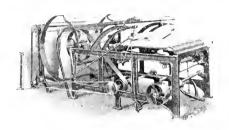
Adjustable and reversible blades.

Let us help you solve your ventilation problems.

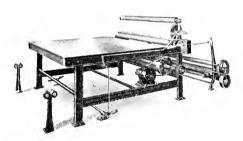
## CURTIS & MARBLE MACHINE CO.

WORCESTER, MASS.

## CLOTH ROOM AND PACKAGING MACHINERY FOR COTTON GOODS



NEW STYLE CLOTH FOLDER With Simplex Drop Table



TYPE H, INSPECTING MACHINE With Flat Table

Inspecting

Sewing

Singeing

Shearing

Brushing

Calender Rolling

Measuring

Spreading

Rolling

Trade Marking

Stamping

Winding

Folding

Doubling

Packaging, Etc., Etc.

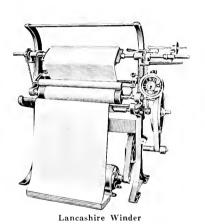
Finishing Machinery for Woolen, Worsted and Felt Goods, Carpets, Plushes, Silks, Embroideries, Rubberized Fabrics, etc.

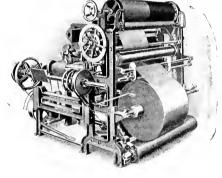
Picking, Burring and Mixing Machines for Wool or Mixed Stock.

# PARKS & WOOLSON MACHINE CO

SPRINGFIELD VERMONT

COTTON MACHINERY FOR WINDING, ROLLING,
DOUBLING, MEASURING, INSPECTING, TRADEMARKING
AND YARDNUMBERING





Model E New York Fabric Packaging Machine

These two machines are for the

## AUTOMATIC PACKAGING

of cottons either in the open width with the Lancashire, or including doubling with Model E

They save their cost, over any other method, in a short time

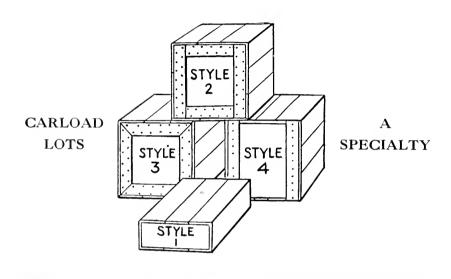
# CHAFFEE BROTHERS COMPANY

OXFORD, MASS.

#### BOXES, CLOTH BOARDS

ESTABLISHED 1883

INCORPORATED 1900



24 YEARS MANUFACTURING

## CLOTH BOARDS

OF THREE KINDS

PATENT, WOOD, PAPER



SAMPLES AND PRICES FURNISHED UPON REQUEST

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COTTON, WOOLEN, WORSTED and KNITTING MILLS, CONVERTERS and BLEACHERIES

PAPERS FOR EVERY PURPOSE



Cone Wrapper, Case Lining Paper

Toilet Paper, Beam Wrapper

Waterproof Paper, Specialties

#### CONTRACTORS

for

Fireproof Roofings, Asbestos Materials, Pipe and Boiler Coverings and Insulations of every description.

Eastern Distributors of "RELIANCE ROOFING"

Guaranteed 10 years without paint

# PARKS-CRAMER COMPANY

SUCCESSORS TO THE G. M. PARKS CO., AND STUART W. CRAMER

# MANUFACTURERS OF HUMIDIFYING APPARATUS

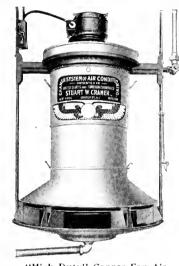
FITCHBURG, MASS.

Branch Offices BOSTON, MASS., 1102 OLD SOUTH BUILDING

CHARLOTTE, N. C.

TURBO-HUMIDIFYING SYSTEM: WASHERS: HUMIDIFIERS. COOLERS: AUTOMATIC HUMID-ITY AND TEMPERATURE

REGULATORS: PSYCHROM-ETERS: DIAPHRAGM VALVES; CONDITIONING EQUIPMENTS.



"High Duty" Copper Fan Air Conditioner

#### COPPER FAN AIR CONDITIONERS. (High Duty)

This air conditioner produces, with approximately the same power expenditure, enormously increased results, both in air

enormonsly increased results, both in air handling and water evaporative capacity. It is the only really successful fan hu-midifier made. The only one that does not blow out drops of water, and that has an instantly accessible interior, with perforated copper pan strainer, and a fan motor re-movable without bothering with bolts or

To take the fan off, merely lift it off. It cannot fall off, as it is secured in a heavy iron ring while in a running position.

The design of inside cover is such that the spray is discharged in a flat horizontal plane, and not drawn back into fan at the top. Local circulation and wet spots around

top. Local circulation and not are each head are thus avoided.

The smooth outside surface presents no unusual humps to be filled with floating lint, and is small compared with its evaporative and air handling capacity.

#### DIAPHRAGM HUMIDITY AND TEMPERATURE REGULATOR.

The essential features of this instrument are the metallic members, expanding and contracting with changes in temperature.

These movements are positive, and of such magni-These movements are positive, and of such magnitude that they can be used without multiplication to open and close valves, and thereby produce a most simple and effective machine for this purpose. In this machine the spray method of maintaining the wet bulb temperature without rags or wicks is used, and this part of the device needs no attention.

#### CENTRAL STATION EOUIPMENT.

Sometimes it is merely desirable to humidify, sometimes to air-wash or to heat, but more frequently to combine either two or more of these features in the same plant and at the same time to automatically control both the temperature and humidity.



Diaphragm Humidity and Temperature Regulator

## PARKS-CRAMER COMPANY

(Continued)

#### VENTILATING FAN AIR CONDITIONERS.

This type of equipment lends itself admirably to ventilating purposes, and is usually arranged with a thimble in the pilaster, or a direct duct connection to the transon on either side, so that part or all of the air drawn through the fan can be brought from out of doors. This head will handle 60,000 cu. ft. of air per hour, and in warm weather reduces it to the wet bulb temperature; while in winter, if hot water is used, as is ordinarily the case, warm tempered air is introduced.

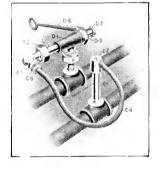
#### TURBO-HUMIDIFYING SYSTEM.

The Turbo-humidifying system imparts additional humidity or moisture to the air in factories or other buildings.

Air under pressure is supplied through a main pipe to the several branch lines in which the heads are located. Parallel with these branch air lines are water lines. These are run dead level.

Water is supplied through a covered, float controlled tank. This tank is equipped with overflow pipe, draw-off pipe, filter, etc., and is covered to keep out dust and lint. The supply tank is a special one, but is about the size of that furnished with any complete toilet room set.

One of the tanks will supply from 60 to 70 heads, but in large rooms the best practice is to divide the system into 2, 3 or 4 separate sections, rooms, or other convenient, accessible places.



Tanks may be located in toilet

It is absolutely impossible for water to overflow from the heads on floors, machinery, stock, etc., for when the air is shut off there is no power to lift the water up to and into the head.

The centrifugal motion imparted to the air by the turbo principle actually pulverizes the water before it is delivered to the atmosphere. The importance of this centrifugal action is noted, since it spreads the vapor and distributes it before condensation can occur.

The water inlet to the head is connected to the riser nipple, C-1, in the water branch pipe by means of a non-corrosive, flexible, metallic tube, C-4, which being provided with union connections, B-2, C-6, makes all parts readily accessible and adjustments easy. Two unions, one vertical and the other horizontal, make it possible to point the jet in any direction.

The turbo valve or coek, D-1, is so located that any head may be shut down without interfering with the others. Simply shutting off the air shuts down the head.

#### COMPRESSED AIR CLEANING.

The next most profitable use of compressed air from the Turbo-humidifier system applies directly to the manufacturing departments through its utilization in cleaning the mill and its machinery.

A hose specially designated for this service and a special cleaning nozzle with operating lever is supplied.

The use of compressed air is the easiest and most economical method of cleaning mill machinery. Write for complete details of this service.

# AMERICAN MOISTENING COMPANY

BOSTON, MASS.

Russell Grinnell President

Frank B. Comins, Vice-Pres, and Treas

SOUTHERN OFFICE: ATLANTA, GA.

Textile Executives and Engineers need no argument to convince them of the necessity of Humidifying Systems.

The only question is—"What System?"

Experience has answered this question for most of the country's greatest plants. They unerringly choose the system that has been satisfying the textile industry since 1888. That is the system designed and installed by American Moistening Company. They know that system by performance not promise. They know it is dependable, efficient, automatically controlled and easily maintained.

Two thousand mills have bought it. Our business is 90% repeat orders. Keen buyers do not come again unless they get their money's worth!

Through new affiliations with Grinnell Company what was already the best service in the humidifying field has been broadened and bettered.

## STANDARD IN MODERN TEXTILE MILL EQUIPMENT.

COMINS SECTIONAL HUMIDIFIERS

FAN TYPE and HIGH **DUTY HUMIDIFIERS** 

VENTILATING TYPE OF HUMIDIFIER (Taking fresh air into the room from the outside)

ATOMIZER or COMPRESSED

AIR SYSTEM

CONDITIONING ROOM

EOUIPMENT

AUTOMATIC HUMIDITY CONTROL (can be applied to sys-

tems already installed)

AUTOMATIC TEMPERATURE

CONTROL

COMINS ELECTRO **PSYCHROMETER** 

LET EXPERIENCE SOLVE YOUR HUMIDIFYING PROBLEM.

# BUFFALO FORGE CO.

BUFFALO, N.Y.

NEW YORK BOSTON PHILADELPHIA PITTSBURGH CLEVELAND CINCINNATI
DETROIT
ST. LOUIS
LOS ANGELES

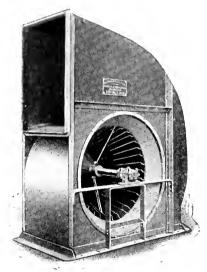
CHICAGO
DENVER
ATLANTA
NEW ORLEANS
MINNEAPOLIS



# Save Your Dyehouse Roof

Steam has a bad habit of condensing on a cold day. It collects on your roof, on the walls and wherever it can find a surface. It drips on the goods and ruins them. It gets so dense that you cannot work to advantage—often it is dangerous.

One of the most expensive and troublesome features of a steamy dyehouse is the rotting and final complete destruction of the roof.



The Buffalo Hot Blast System eliminates the steam entirely. Moreover, it is positive. It is guaranteed.

If you want complete, detailed data, consult our Engineering Department. Each problem must be handled separately. We will gladly, and without charge, submit the information you want. Simply give us your problem and let us tell you all about the Buffalo Way. Write for Bulletin 721–32.

# National Aniline and Chemical Co.. Inc.

General Offices

21 BURLING SLIP

NEW YORK



# Dependable Cotton Dyes

The several groups of dyes usually employed by manufacturers of cotton goods are now regularly produced by this Company.

In shade, strength, and working qualities,

# "NATIONAL" DYES

are fully equal to their pre-war types.

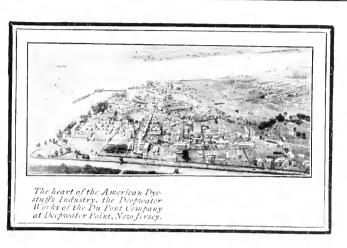
The gradual development of these dyes so as to ensure satisfactory results, is a triumph of the skill of American Dye Makers, and contributes to the establishment of this important National Industry.

# E. I. du Pont de Nemours & Company

DYESTUFFS SALES DEPARTMENT

WILMINGTON

DELAWARE



# Building for permanence and not

to meet a wartime emergency, our vast Deepwater Plant is the visible pledge of the Du Pont Company to America that her dyestuffs needs will be met, no matter what the situation without her borders.

From the research laboratory, through every phase of manufacture back to the checking laboratory, adequate facilities, involving a tremendous investment, are provided for large scale production of the essential dyestuffs required by the textile manufacturers and other dyestuffs consuming industries.



E. I. du Pont de Nemours & Co., Inc. Sales Dept., Dyestuffs Division WILMINGTON, DEL.



# ARNOLD, HOFFMAN & CO., INC.

Established 1815

PROVIDENCE, R.I.

New York, N.Y. Philadelphia, Pa. Boston, Mass. Charlotte, N.C.

Importers and Manufacturers of

# Starches, Gums, Dextrine, Alizarine Assistant, Soluble Oil, Soap

and Every Known Material from Every Part of the World for Starching, Softening, Weighting and Finishing Yarn, Thread or any Fabric

> Special Attention Given by Practical Men to Specialties for Sizing, Softening, Finishing and Weighting COTTON, WOOLEN, and WORSTED Fabrics, combining the Latest European and American Methods

We believe there is no Problem in SIZING or FINISHING that we Cannot Solve

FORMULAS for the Best Method of Obtaining any DESIRED FINISH on any Fabric cheerfully given

# KUTTROFF, PICKHARDT & CO.

INCORPORATED

128 DUANE STREET, NEW YORK

#### BRANCH OFFICES:

Philadelphia: 111 Arch Street Boston: 86 Federal Street Providence: 52 Exchange Place

Chicago: 305 W. Randolph Street

ALSO

Montreal: 55 St. François Xavier Street

# DYESTUFFS COLORS CHEMICALS

#### **EXTRACTS:**

Logwood Hypernic **Fustic** 

> Indigo Hematine

> > **Ouercitron Bark**

HYDROSULPHITE CONCENTRATED POWDER BLANKIT-DECROLINE

# "BRETON" MINEROL

PRODUCTS FOR COTTON

F? FOR SOFTENING AND FINISHING

S? FOR SCOURING & KIER BOILING

Suitable Products Producing Permanent Results

# LUBRICANTS for TEXTILE MACHINERY

"CRYSTAL" SHEAR OIL
"PARAGON" LOOM OIL "PARAGON" SPINDLE OIL

"COLO" AND "SILEX" GREASES

The Proper Lubricant for Every Need

# BORNE, SCRYMSER COMPANY

Established 1874

80 South Street, New York

BOSTON

PHILADELPHIA

Works: Elizabethport, N.J.

## **BOSSON & LANE**

ESTABLISHED 1895

WORKS AND OFFICE, ATLANTIC, MASS.

#### MANUFACTURERS OF SPECIALTIES FOR THE TEXTILE TRADE

High Grade Sulphonated and Saponified Castor Oil Products

Alizarine Assistant

Castor Soap Oil

Turkey Red Oil

Monoline Oil and Soap

Soluble Oil

Oleine Oil (ammoniated)

Bleaching Oil

Kerolene (soluble kerosene)

Soluble Grease

Victor Oil (special sizing for cotton warps)

Soluble Rosin Oil

KLOROSENE, a superior solvent for oil or grease spots

B & L Anti-Chlorine

Yorkshire Scouring Salts

Bleach Assistant

Detergine

Alpha Soda

Soluble Wax

Soda Carbon Olate

Snoflake Softener

SPECIAL SIZING AND FINISHING COMPOUNDS

B & L BLEACHERS BLUINGS AND VIOLET TINTS

#### BOSTON DELIVERIES

# Electro Bleaching Gas Co.

# PIONEER MANUFACTURERS of LIQUID CHLORINE

Plant: NIAGARA FALLS, N.Y

Main office 18 East 41 5 Street New York. Chicago office 11 So. La Salle St.

# Liquid Chlorine

FOR BLEACHING

- -is easy to control
- -is chemically pure
- —is of 100% bleaching efficiency
- -entails no waste or loss
- -insures cleanliness of operation
- -gives uniform and level colors

#### It eliminates

- —tendering of goods
- —lime stains
- —disagreeable fumes
- —dust to injure dyed goods
- --objectionable sludge

# ABOUT OUR CONTAINER EQUIPMENT

Aside from the size and variety of our container equipment, included in which are cylinders, ton drums and tank cars, we take pride in the manner and condition in which it is maintained and its usual availability for efficient service.





## THE SOLVAY PROCESS CO.

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### TEXTILE SODAS

For All Purposes

SOLVAY CAUSTIC SODA SOLVAY SODA ASH SOLVAY CAUSTIC ASH SOLVAY CLEANSING SODAS

If you have any Alkali Problems write our Technical Service Dept., The Solvay Process Co., Syracuse, N.Y. Get on our Mailing List for Solvay Bulletins,—they give the best methods for Analyzing Alkalies. Your Chemist will appreciate them.

# NEW YORK AND NEW JERSEY LUBRICANT COMPANY

401 Broadway, NEW YORK

Warehouses: Newark, N. J., Charlotte, N. C., Atlanta, Ga., New Orleans, La.

ORIGINATORS AND SOLE MANUFACTURERS



#### Modern Textile Lubricants

The world moves onward—step by step. New ideas—new methods—new men—

The world moves onward—step by step. New ideas—new methods—new men—must be produced to meet the new demands.

Just as improved equipment is rapidly replacing obsolete outworn types—so is NON—FLUID OIL an improved lubricant replacing ordinary oils and greases.

Fluid oils are wasteful and inefficient. They leak out, drip, spatter and cause oil stains. Bearings require constant re-oiling to keep them from running dry—a loss of time as well as lubricant. Output of perfect goods from looms is cut down, because of damage from oil.

Leading mills throughout the country have found it possible to get away from these drawbacks by using NON-FLUID OIL, which is produced in grades adapted to nearly all kinds of bearings in textile mills. Below are listed some of the principal grades.

"A-No. 00": For comb-boxes, cylinder bearings, lieker in bearings of cards, cams of combing machines and looms.

of combine mactines and tooms.

Combibores run from 6 to 8 weeks on one filling of "A-No. 00" as against 3 to 6 days with fluid oil. This product does not drip onto floors nor spatter on card clothing and drawing cans like fluid oil. When

ing and drawing cans the fude off. What applying, only enough should be put in box to cover cams; do not fill boxes too full.

"A-No. 000": For use where a lighter grade than "A-Oo" is preferred—particularly in ring-oiling shafting, fan and beater berging of breather intermediate and fin. tarty in ring-oiting shafting, fan and beater bearings of breaker, intermediate and finisher pickers, necks of rolls on sliver and ribbon lap machines, combing machines, drawing frames, roring frames, ring spining and mule frames and twisters, cylinder bearings of spoolers; on reels and all parts of lower machinery that are oited by hand with oil caus.

For spinning room service "4-No ago"

For spinning room service "A-No. 000" can be used in oil cans but feeds only one drop at a time instead of in a stream like fluid oil, therefore prevents waste and pro-motes cleanlings. Dass not say off hour motes cleanliness. Does not run off bearings like fluid oil, hence need be applied only one-third as often. If on filling oil caus with this "A-No. 000" grade it does cans wein into A-NO, vor grade it does not feed as many drops per minute as de-sired, cut off about 34 of an inch from spout of can to increase the feed; it should discharge at the rate of 40 to 50 drops

per minute.

"A-No. 00000": For use where a lighter grade than "A-No. 0000" is desired—ES-PECIALLY ON BEARINGS OF LOOMS, quilling machines, Universal Cone Winders, and ring-oiling bearings of cotton shear-

and ring-oiling bearings of cotton shearing machines.

"K-No. 00—Special"; For use where a hearier grade than the "A-No. 00" is desired—particularly on cams of combing machines, loom cams, picker rods, picker shors, picker balls, chain work, loom jackets, ball and roller bearings, nappers, and in oil boxes on heavy machinery and shafting.

"K-No. 000". For use in compression

"K-No. 000": For use in compression cups on bearings of engines, pumps and air compressors; also on loose pulleys, friction clutches, elevator guides, and gencrally in place of ordinary grease. Lasts much longer and keeps bearings cooler than ordinary grease; also prevents wear better, does not gum, and is not affected by extremes of heat and cold.

#### WHITE GRADES

For lubricating travelers on twister rings, particularly where wet twisters are employed. These products do not befoul the rings and rails; perceptibly lengthen the life of travelers; cause the work to run better, thus diminishing the number of ends breaking down, and last but not least—largely reduce the percentage of stained narm. stained yarn.
"K-Extra," "K-X" and "K-XX" grades

should be applied sparingly in the same manner as tallow mixtures. "K-XXXXX" can be applied with oil cans, being especially prepared for use in this way.
"K-XXXX": For necks of rolls on wet

twisters.

#### CAUTION

NON-FLUID OIL should not be confused with thin grease substitutes that are being put out under similar names. The genuine NON-FLUID OIL is made only by us and the above trade-mark appears on every package. Look for it.

Write for copy of special bulletin "Lubrication of Textile Machinery," and free test samples.



## THE TEXAS COMPANY

17 Battery Place, NEW YORK CITY



NEW YORK

CHICAGO

OFFICES IN PRINCIPAL CITIES

# Three Texaco Specialties for the Textile Mill:

#### TEXACO RABTEX SPINDLE OIL

A light-bodied, straight mineral oil. It is the result of long experimentation and represents the finest oil for the lubrication of Rabbeth or Ring Spindles in textile mills.

The use of Texaco Rabtex Spindle Oil will reduce the power necessary to drive the spinning frame. It is endorsed by the mills using it as the most wonderful spindle oil ever produced.

#### TEXACO COMB BOX LUBRICANT

A product specially prepared to meet the difficult conditions encountered in the comb

It shows its suitability for the work in two wavs:

FIRST: One filling of Texaco Comb Box Lubricant lasts two or three times as long as the other kinds.

SECOND: In every case we have shown that with Texaco Comb Box Lubricant there is a considerable reduction in frictional temperature of the box. Sometimes this difference exceeds 15 degrees.

While the reduction of frictional heat through the use of Texaco Comb Box Lubricant is important, it is only a sign of the perfect lubrication secured. And this perfect lubrication means that the wear of the cams is reduced; the accuracy of the setting is maintained—and through this, the strength and uniformity of the stock is insured.

#### TEXACO TOP ROLL LUBRICANT

A smooth uniform lubricant with the right body for the work. It is practically stainless in use-it does not creep onto the rolls and come in contact with the materials. It does not change its consistency under operating conditions so that a highly desirable uniformity of speed of the top roll

is insured aiding in the even drawing of the stock.

This lubricant is also used on roll necks, cams, differential motions, and draft gearing on slubbers, intermediates, and jack roving frames.

#### OTHER TEXACO LUBRICANTS ARE:

TEXACO LOOM OIL TEXACO TURBINE OILS TEXACO GEAR LUBRICANTS TEXACO MACHINE OILS TEXACO ENGINE OILS TEXACO GREASES

# THE WALSH & WEIDNER BOILER CO.

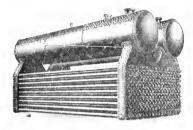
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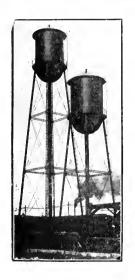
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#### WATER TUBE BOILERS

All our water-tube boilers are designed and built in accordance with the A. S. M. E. Code. All steel construction throughout. Three types -Cross Drum, Horizontal Drum and Inclined Drum. Sizes 100 to 1,000 H.P. Working Pressure 100 pounds to 300 pounds.

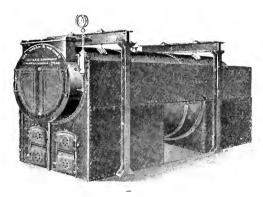


# TOWERS AND TANKS STEEL BUILDINGS AND STRUCTURAL WORK

Our towers and tanks are built of the best materials by expert workmen according to Insurance Specifications and are erected by experienced erection crews.

## HORIZONTAL RETURN TUBULAR BOILERS

Our Improved Drop Combustion Chamber Type Steel Casings require 10 to 25 per cent. less coal than old-style brick settings.

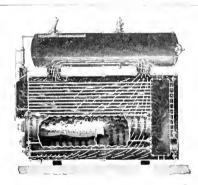


Write us for Catalogue

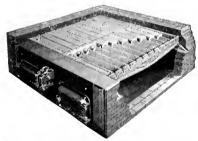
# INTERNATIONAL ENGINEERING WORKS, INC.

Main Office & Works Framingham, Mass. BOSTON OFFICE BOARD OF TRADE BLDG.

# HIGH PRESSURE STEAM BOILERS STEEL PLATE WORK OF EVERY DESCRIPTION



BRADY SCOTCH BOILERS give high efficiency by combining rapid positive circulation and internal firing. No brickwork. Minimum repairs.



MACDONALD SHAKING GRATES give more efficient combustion, save fuel and increase boiler capacity. Powerful leverage for shaking and breaking up clinker, fool proof locking device, adjustable air openings, unrestricted air passages.

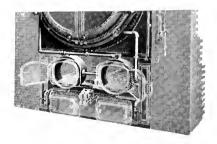




#### VERTICAL TUBULAR BOILERS

All the best features of both Manning and straight shell types — minimum space per horse power, designed for the higher steam pressures. Superior construction.

Improved fire door opening.



#### SMITH DOOR PROTECTORS

Reduce the largest item of repair expense of boilers by cooling the fire doors and fronts. Protectors are piped to save the heat absorbed and are of steel to last as long as the boiler.

HORIZONTAL RETURN TUBULAR BOILERS constructed according to the rigid requirements of the Massachusetts Board of Boiler Rules.

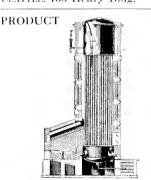
# THE WICKES BOILER CO. VERTICAL WATER TUBE BOILERS.

SAGINAW, MICHIGAN.

Sales Offices:

New York, 1716 West St. Bldg. Boston, 201 Devonshire St. Seattle, 736 Henry Bldg.

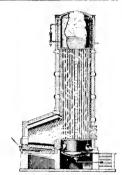
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Man Stands Erect Cleaning



Steel Case Setting Increases Efficiency



Great Height Insures Dry Steam

#### DESCRIPTION

Designed and built in accordance with the A. S. M. E. Boiler Code.

Built of homogeneous metal. No east metal of any kind used. All tubes perfectly straight.

Very highest class workmanship known to the art put upon these boilers.

No special parts used. Material can be furnished and boiler repaired by local boiler maker.

Baffle tile is heavy, rabbetted, tongued and grooved and cannot be misplaced.

Easiest boiler to open, wash or turbine and close on the market. Hence, can be operating the maximum number of hours per year.

Accessible mud drum located at the lowest point of the boiler.

Gases have a very long travel; entirely surround and scrub heating surface from

entrance to release. There are no passages in setting not filled with heating surface. No opportunity

exists for gases to short-circuit heating surface. No opportunity exists for gases to short-circuit heating surface.

Precipitation of soot and impurities in water are taken advantage of by gravity to the fullest possible extent.

Steel cased settings stop air leaks and so increase efficiency.
Great height of steam outlet from water level, coupled with liberal steam storage capacity, results in absolutely dry steam being delivered to this boiler.

#### BULLETINS

Ask for Educational, Technical Bulletins, illustrated with Wickes Vertical Water Boilers. These Bulletins are free while they last and are:

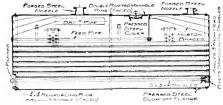
Reducing Costs in the Boiler Room.

The Magnitude and Prevention of Air Infiltration Losses.

Saving Coal in Steam Power Plants.

Aids in the Selection of a Steam Boiler With a Peep at the Wickes Vertical Water Tube Boiler.

#### HORIZONTAL RETURN TUBULAR BOILERS.



A. S. M. E. CODE RETURN TUBULAR BOILERS. Ask for Catalogue Covering Design and Workmanship.

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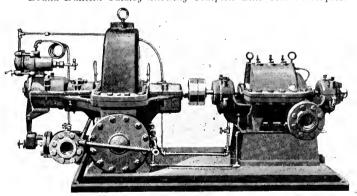
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### TRIPLEX, CENTRIFUGAL, DEEP WELL AND HAND PUMPS

Bound Bulletin Catalog Showing Complete Line Sent on Request



Goulds Turbo Centrifugal Boiler Feed Pump

The Goulds Turbo boiler feed pump unit possesses many improved features which insure a performance heretofore unknown in boiler feeding. If you have not used one of these Goulds units, you do not yet know what real boiler feeding is. Standard units carried in stock for plants of 1,000 to 10,000 Boiler Horse Power.

### WM. B. SCAIFE & SONS CO.

OAKMONT, PA.

NEW YORK OFFICE 26 Cortlandt St.

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Pittsburgh Office 28 SOUTH DEARBORN ST. FIRST NAT'L BANK BLDG.

WATER FILTERS OF THE PRESSURE OR GRAVITY TYPE FOR ALL COT-TON MILL REQUIREMENTS: CONTINUOUS AND INTERMITTENT WATER SOFTENING AND PURIFYING SYSTEMS.

#### WATER FILTRATION

Many water supplies are a constant source of waste and expense to cotton manufacturers on account of the impurities carried in suspension. Turbid water or water containing iron, either in solution or in suspension, is unsuitable for use in those processes where it comes in contact with the product.

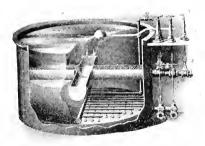
Turbid water when used for circulating in cooling jackets, condensers, etc., causes a loss in efficiency and an expense for cleaning pipe lines

and apparatus.

These-SCAIFE--filters are in use for all purposes. They are unequaled for design, material, workmanship and efficiency. Our pressure filters are particularly adapted for connecting into existing pipe lines. They are suitable for all uses for filtering under pressure and where space is limited they are the most economical to install. These filters are suitable for clarifying water for mill use, cooling purposes, hydraulic systems, swimming pools, offices, or any other requirement for clear water.



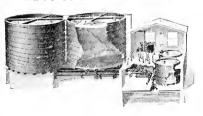
#### GRAVITY FILTERS (Patented)



Gravity filters are built in units with capacities varying from 8,000 to 1,600,000 gallons per 24 hours each. Combinations for practically any capacity with required sedimentation can be furnished. Patented brass conical strainers and patented valveless coagulant feed apparatus are special features embodied in these filters. Gravity filter systems are designed for automatic operation to give accurate preparatory treatment, to meet any of the conditions that apply to various water supplies, so that a uniform result is constantly obtainable.

#### WE-FU-GO and SCAIFE WATER SOFTENING and PURIFYING SYSTEMS WE=FU=GO SYSTEM (Patented)

The design for each installation and performance guarantees are based upon scientific investigation of water supply and uses, supplemented by analysis and treatment of water in our own labora-tory. Filters are included with all softening systems: therefore water both soft and clear is obtainable from any source.



"I type to meet every stoker need"

#### SANFORD RILEY STOKER CO.

Worcester, Mass.

Makers of

RILEY STOKERS

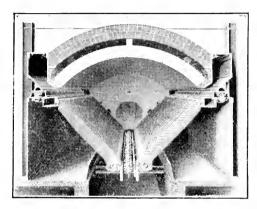


MURPHY IRON WORKS

Makers of

### MURPHY FURNACES

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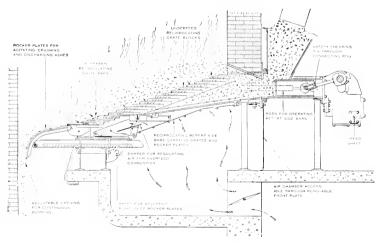
The type of Stoker you need is determined by the size of your boilers, fuel, load conditions and other local factors. Naturally, one type will not meet all these conditions but in the Riley Underfeed Stoker and Murphy Automatic Furnace you have a choice that will meet practically any condition.

For the plant with large boiler units or with smaller units that are to be forced above rating or where reserve capacity is essential, the Riley Underfeed Stoker meets the conditions. The moving grates—found only on the Riley—keep the fuel bed broken up and

insure a mixture of air with coal that results in high capacity and efficiency.

For the plant with smaller boiler units or with medium size boilers carrying a steady load, the Murphy Antonatic Furnace has proved its worth in thousands of installations. Operating on natural draft the original outlay is comparatively small. This furnace requires very little attention and the operator need not be so highly skilled.

Our engineers will gladly analyze your power plant problem and recommend the equipment lest suited to your needs.



#### HAMMEL OIL BURNING EQUIPMENT CO.

185 Devonshire Street, BOSTON, MASS.

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#### **Undreamed of Flexibility Possible** with **Hammelized** Boilers



The turning of two valves in the oil and steam connections of a boiler equipped with the Hammel Oil Burning System is all that is necessary to meet even the most unusual demands for more steam, and meet them instantly.

There is no delay or inconvenience while the stokers labor to take care of the unexpected demands.

The Hammel Oil Burning System efficiently utilizes any grade of oil or gas house tar. There is no coal to pass, no ashes to handle, no smoke.

Thousands of installations operating under every condition prove the efficiency and economy of this system.



110-3

# PETROLEUM HEAT & POWER COMPANY, Inc.

New York 511 Fifth Ave. Boston 100 Boylston St. Providence, R.I. Turks Head Bldg. Factory Stamford Conn.

#### CUT YOUR FUEL OIL BILL!

And Increase Your Boiler Efficiency by Installing Our

#### AUTOMATIC REGULATOR

It Automatically Controls the Flow of Oil, Air and Steam to Maintain Any Desired Boiler Pressure.

Is Adjustable for Any Range of Load. Capacity up to  $3{,}000$  H. P.

#### Requires No Attention. Is Absolutely Automatic.

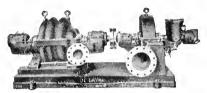
Adapted to All Types of Boilers and to Steam Pressures Above 75 Pounds. (We also specialize in regulators for lower pressures.)

Write us for Further Information. Mail Letter to Office Nearest You.

#### DE LAVAL STEAM TURBINE CO.

TRENTON, NEW JERSEY

#### INSTALL DE LAVAL TURBINE-DRIVEN MACHINES



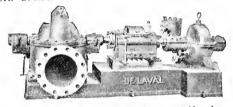
De Laval turbine-driven centrifugal boiler feed pump; 800 gal. per min., against 520 ft. head.

E LAVAL STEAM TURBINES are of the single-stage, velocity-stage and pressure-stage types, and are built for all steam and exhaust conditions and in all canacities up to 15,000 hp.

DE LAVAL CENTRIFUGAL PUMPS are built for all capacities and pressures, from boiler feeders to geared turbine-driven pumping units of the largest size, and for all methods of driving, including electric motor, and directly connected and geared steam turbines. De Laval steam-turbinedriven centrifugal pumps hold the highest records for efficiency and duty.

THE DE LAVAL DOUBLE-HELICAL SPEED REDUCING GEAR was originally designed for steam turbine service, and has been perfected and fully tested by extensive use. Over 2,000,000 hp, of De Laval gears are now giving wholly satisfactory service. De Laval Centrifugal Pumps driven by De Laval Geared Turbines, realize overall economies greatly superior to those of triple-expansion pumping units. Standard-speed direct-current generators, driven by De Laval Geared Turbines, are the most efficient and reliable means for supplying direct current. The De Laval Gear is free from noise and vibration in operation, and shows an efficiency above

98%. Speed ratios up to 20 to 1 can be secured in one reduction. THE DE LAVAL METHOD OF MANUFACTURE — De Laval Steam Turbines, Centrifugal Pumps, Blowers, Compressors and Speed-reducing Gears are built in a shop producing solely are built in a snop producing solery high grade turbine and centrifugal machinery. Designs and methods have been developed and perfected by continuous specialization upon this class of work for over 25 years. Only



De Laval geared turbine-driven centrifugal circulating pump.



De Laval Geared Turbine for direct connec-

high-grade materials are used, and skilled men, trained in this class of work, are employed throughout. All parts are made to limit gages upon an interchangeable basis, and repair parts can be placed in machines by ordinary attendants without requiring to be fitted. All De Laval apparatus is made with horizontally split casings, and internal working parts are at once accessible upon lifting the casing covers and can be lifted out after removing bearing caps. Piping connections are to the lower parts of the casing and need not be disturbed. All machines are guaranteed as to capacity and efficiency, and are given a thorough test before leaving the shops. This policy of thorough-going testing has led to continuous improvements in apparatus.

State the requirements of service, so that our Engineering Department can suggest the best solution of your power, pumping and air-compressing problems.



Ask for special publication

No. B-89.

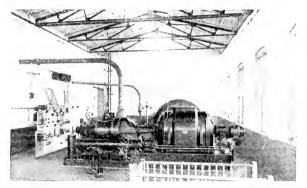
Direct-current generator, driven by De Laval geared steam turbine;

#### ALLIS-CHALMERS MFG. CO.

MILWAUKEE, WISCONSIN

District Offices in All Principal Cities

### COMPLETE POWER AND ELECTRICAL EQUIPMENT FOR TEXTILE MILLS



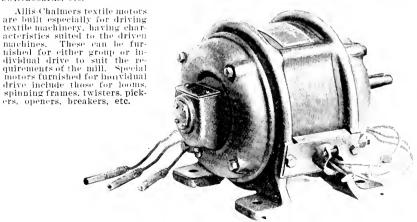
Power Plant Equipped with Turbines, Engines, Generators and Switchboard

Allis-Chalmers equipment for textile mills includes power equipments of every type as well as auxiliary electrical apparatus, a full line of textile motors for group or individual drive, een trifugal pumps, air compressors, transmission machinery, etc.

In the line of power machinery the Allis-Chalmers Manufacturing Company builds every type of prime mover—steam turbines, steam engines, hydraulic turbines, gas engines, and oil engines—together with a full line of generators for each type—also steam condensers of any size and all types. It is the only

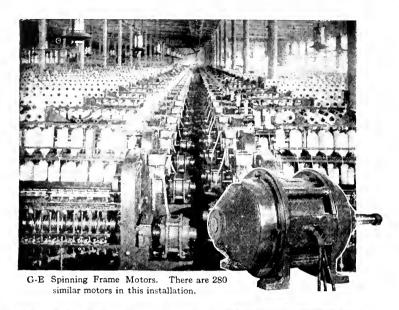
of any size and all types. It is the only organization in the world furnishing complete power equipments of all types, built in the same shops and under one management.

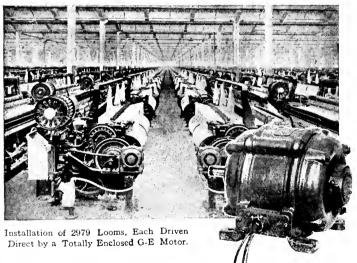
This is supplemented by a very complete line of auxiliary electrical apparatus consisting of exciters, transformers, converters, motor-generators, frequency changers, switchboards, etc.



Loom Motor

A complete line of high-grade power transmission machinery is also supplied, including pulleys, shafting, hangers, couplings, clutches suitable for textile drives.







#### The Day of Motor Drive is at Hand— Each Machine Equipped with Its Own Motor

When electric drive was first installed in textile mills the high cost and relatively low efficiency of the small motors available at that time, naturally tended to perpetuate the "group drive" principle.

Today, however, due to improved motor design and methods of manufacture, the progressive textile manufacturers and engineers realize that they cannot afford to use any system other than that which employs a suitable individual motor for nearly every textile machine.

The result is increased production at a power cost in direct proportion to the work done, and the complete elimination of all torsional disturbances so prevalent with overhead line-shafting. Belting is also eliminated, cleanliness secured, noise subdued, and fire hazard and personal danger lessened, while ventilation and illumination are improved.

More than twenty-five years ago the General Electric Company was a pioneer in the field of electrification of textile mills and has continued to design and manufacture successfully a full line of motors and electric control equipment for operating all types of textile machinery, besides designing and building equipment to furnish the necessary power.



44-37

#### WESTINGHOUSE ELEC. & MFG. CO.

EAST PITTSBURGH, PA.

Sales Offices in all Large American Cities



#### THE MASON COTTON FABRIC CO.

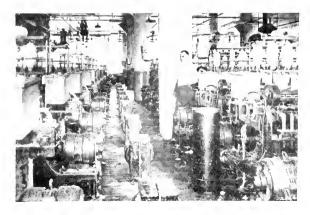
Manufacturers of

#### ALL FABRICS FOR MASON TIRES

According to the best practice of today, the Mason Cotton Fabric Company has installed Westinghouse Individual Motor Drive on the spinning frames of its new mills at Kent, Ohio.

Thus this company is assured of from 5% to 7% greater production than can be produced with other methods of drive.

- -Increased Production
- -Better Plant Layout
- -Freedom from Overhead Construction
- -Better Lighting
- -Cleanliness
- -Congenial Working Surroundings



#### LINK-BELT COMPANY

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WORLD'S LARGEST MANUFACTURER OF ELEVATING, CONVEYING, AND POWER TRANSMISSION CHAINS



#### LINK-BELT SILENT CHAIN

Link-Belt Silent Chain is rapidly becoming the standard drive for textile machinery.

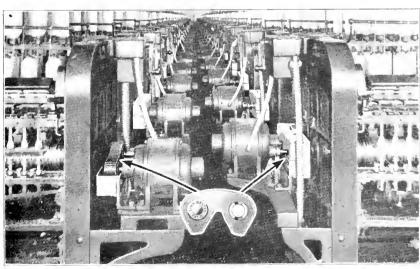
Its superiority over all other forms of transmissions is being demonstrated by our numerous installations.

It is "Flexible as a Belt—Positive as a Gear—More Efficient than Either."

Briefly, its adoption leads to increased production, better product, reduced power bills; saves floor space. It is 98.2% Efficient on actual test.

Let one of our experienced Textile Drive Engineers study power transmission conditions in your mill.

Send for Book No. 425



#### MORSE CHAIN CO.

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Main Office and Works ITHACA, N.Y.

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141 MILK STREET

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Minneapolis, Strong-Scott Mfg. Co., 413 3rd St.
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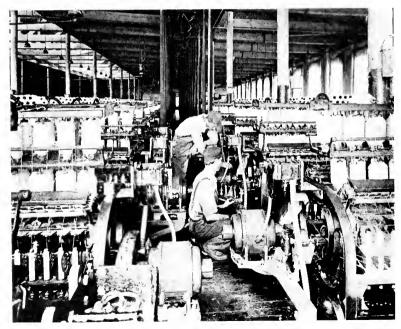
#### MORSE ROCKER JOINT SILENT CHAIN DRIVES

WITH CENTER GUIDE LINKS UNIFORM SPEED INCREASING PRODUCTION

#### COMPACT—DURABLE—EFFICIENT

Special information and estimates furnished for any application

SAVE FLOOR SPACE BY SHORT CENTERS



CHANGING OVER WITHOUT SHUTTING DOWN Benefit by MORSE SERVICE as others do.

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#### MORSE SILENT CHAIN DRIVES

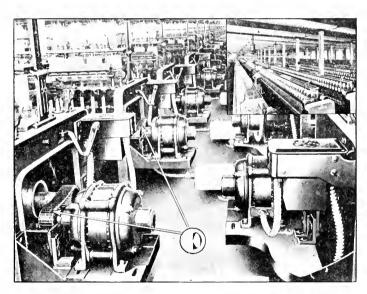
Provide a Flexible Gear Connection between Individual Motors and Cotton Spinning Frames and Twisters.



They Insure a Constant Speed for the Cylinder Shaft, Run Smoothly and Without Vibration.

Let us Prove to you that this means an INCREASED PRO-DUCTION from the Frames—a STRONGER YARN.

#### RUN COOL, OIL BATHS NOT REQUIRED



End View of Cotton Twister Frame with 5 H. P. Individual Motor and Morse Silent Chain Drive

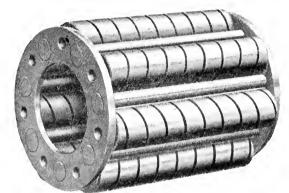
Benefit by MORSE SERVICE as others do.

#### HYATT ROLLER BEARING COMPANY

#### INDUSTRIAL BEARINGS DIVISION

NEW YORK, N.Y.

Motor Bearings Division Detroit Tractor Bearings Division Chicago, Ills.



Split Outer Race Type of Hyatt Roller Bearing

#### HYATT ROLLER BEARINGS and TEXTILE MACHINERY

Mill owners are finding that it is a matter of vital importance to them to know the reasons for the rapidly growing use of antifriction bearings on textile machinery.

Textile machines equipped with Hyatt Roller Bearings give superior, dependable, economical service at a very slight increase in initial cost.

Briefly, Hyatt Roller Bearings will improve your textile machinery because they:

1. Eliminate 50% of the dragging friction of plain bearings by providing a true rolling motion, which makes possible a substantial saving in power.

2. Give positive lubrication and cleanliness of operation at all times and they need be lubricated only once every several months, with a consequent saving in lubrication costs. 3. Eliminate constant shut downs for repairs and replacements because they are durable and dependable and will give years of satisfactory service with unvarying success.

It will pay you to specify Hyatt Roller Bearings for your textile machinery. Write for further information.

#### JOHN A. STEVENS

#### **ENGINEER**

#### POWER PLANTS

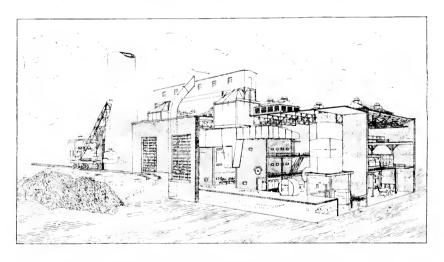
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# LIGHT, HEAT AND POWER PROBLEMS STEAM, ELECTRIC AND HYDRAULIC POWER PLANTS ANALYSIS — DESIGN — SUPERVISION OF CONSTRUCTION

#### PURCHASED POWER CONTRACTS NEGOTIATED



Successful reconstruction calls for more engineering skill than new construction. The above cut shows one of several such powerplant revisions which we are completing. By this arrangement an old boiler and engine house are utilized to accommodate thoroughly modern equipment.

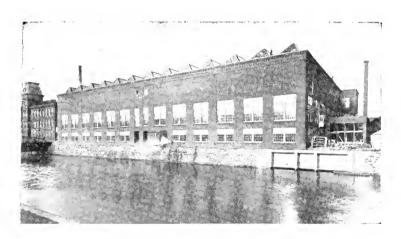
Whether you require plant revision or a new plant we will save you money.

Let us solve your problems.

#### SAMUEL M. GREEN CO.

SPRINGFIELD, MASS.

#### **ENGINEERS**



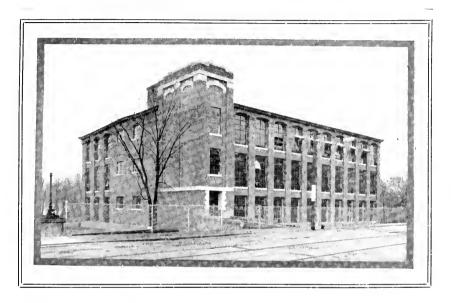
FARR ALPACA CO. "D" WEAVE SHED Designed and erected by us during 1920

We offer a complete service or any part thereof for the design and construction of Textile Mills, Bleacheries, Dye Houses, Power Plants, etc., which includes every step from the preliminary investigations and drawings of the plans, to the erection of the building and the installation of the equipment.

A service backed by the experience of twenty-five years. We should like to tell you about it.

#### CHARLES T. MAIN ENGINEER

201 Devonshire Street, BOSTON, MASS.



# Is your plant organized to meet the latest trend in Cotton Goods Manufacture?

PROFIT-MAKING now, more than ever before, is dependent on the amount of careful study put into organization and construction to meet the latest demands of production, distribution, and minimum expenditure of effort.

Through years of experience in textile-plant organization, engineering, and mill-construction, we have gained an intimate knowledge of all problems connected therewith; we are prepared to solve questions of cramped quarters; rearrangement of machinery and equipment; improving working conditions; quality and quantity of product; handling, storage and shipping facilities; and shortage of power.

If you contemplate new buildings or additions, we are prepared to give efficient service in preliminary study and reports, and in design and supervision of construction.

We handle promptly valuations for purposes of insurance and taxation.

# MONKS & JOHNSON ARCHITECTS - ENGINEERS

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INVESTIGATION — DESIGN SUPERVISION OF CONSTRUCTION

#### Generous Service

Our ideal of architect-engineer service is to design buildings for greatest production (or usefulness); fewest accidents; best health; of good style; and of best ultimate economy.

We investigate deeper and more thoroughly than may seem necessary.

Our designs are worked out more fully than is possible when less ability and experience are put on the problem.

We are a service-rendering organization—we design and supervise construction, but we do not construct.

Because of the exactness of our specifications we get truly competitive estimates from contractors.

Because we have no selfish interest in any material, equipment, or construction, our supervision is fairer to both owner and contractor.

The development of our ideal has brought together an engineering staff of high ability and broad vision, and with a desire to give more service than is expected of us.

Generous service is a habit with our organization.

# LOCKWOOD, GREENE & CO.

EXECUTIVE OFFICE, 60 Federal Street, BOSTON

BOSTON DETROIT ATLANTA CLEVELAND CHICAGO CHARLOTTE NEW YORK

SANTIAGO, CHILE

LOCKWOOD, GREENE & CO. OF CANADA, LIMITED, MONTREAL COMPAGNIE LOCKWOOD GREENE, PARIS, FRANCE



### Originators of Better Methods for 88 years

A CKNOWLEDGED leadership, in any field of endeavor, is dependent upon more than lengthy and continuous effort. Supplementing such service there must be originality in thought and action, imagination made practical by good judgment and clear thinking, and a constant consideration of the needs and possibilities of the future.

For 88 years Lockwood, Greene & Co. have combined these requisite attributes of leadership in cotton mill and textile engineering.

This organization was the pioneer in building cotton mills directly connected with water-powers. After the development of the Corliss engine this firm was first in the development of the engine-driven mill with rope drive. It designed the first mill driven electrically from a water power, and the first mill driven electrically from a steam plant. It designed the first large cotton mill of reinforced concrete.

When choosing an engineering service for the improvement or development of your plant, it will be well to avail yourself of the experience and resourcefulness of Lockwood, Greene & Co., Engineers.

#### J. E. SIRRINE & COMPANY

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Write for a copy of "Picks to the Minute," describing features of modern textile plants.

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CHICAGO DETRŌIT PITTSBURG



FACTORY BUILDING OF NARROW FABRIC COMPANY
Wyomissing, Pa.

BOTH speed and economy marked the construction of the reinforced concrete factory built for the Narrow Fabric Company of Wyomissing, Pa.

This building is a modern, fully-equipped, four-story and basement factory, 456 ft. x 90 ft. of flat-slab construction, with exposed concrete columns and spandrel beams and brick spandrel walls. It is designed for a superimposed floor load of 150 lbs. per sq. ft. The equipment installed includes sprinklers, plumbing, two 4000-lb. elevators, and heating, lighting, telephone, fire-alarm and call systems. Floor area is 187,000 sq. ft.

The entire building was completed and turned over to the owners within 5 months from the date of starting the contract.

# ABERTHAW CONSTRUCTION CO. CONTRACTING ENGINEERS

Boston

Atlanta

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Buffalo



Where
Equipment
Dominates

It is an industrial commonplace that command of adequate mechanical equipment is essential to command of economical production. The same principle that applies in the manufacture of textiles applies in the construction of the mills which house the processes.

ABERTHAW owns outright the larger proportion of the machinery—large and small—which spells speed and economy in building. It maintains a special department to ensure its perfect repair. More than this, it puts real brains into the selection of exactly the right equipment to meet the requirements of each contract. These are among the vital elements that make *Built by Aberthaw* synonymous with minimum cost and maximum reliability.

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Where the Human Element Counts



The construction of industrial establishments increasingly entails responsibility for the building of dwellings to house their working population. It is a responsibility whose problems are not easily solved.

In many cases, however, the Aberthaw System of standardized dwellings will be found to meet the situation most satisfactorily.

The System has been devised after exhaustive study. It aims to achieve suitability by meeting a thoroughly understood human requirement. It achieves economy by quantity production of a carefully modified range of units every step in whose construction has been planned in advance.

Occupying a favorable position between the ready made and the specially made in housing developments, the Aberthaw System invites investigation.

#### GENERAL BUILDING COMPANY

INCORPORATED

524 Harrison Ave.



BOSTON, MASS.

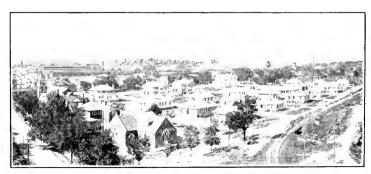


Apartment Block built in connection with the housing development for the Lancaster Mills, Clinton, Mass.

In the Pilgrim Northland and in the Cavalier Southland, this corporation is working to meet the present day housing problem.

If you have a housing problem or contemplate the erection of a factory, warehouse or other building, we would welcome an opportunity to discuss the matter with you.

Send for our booklet.

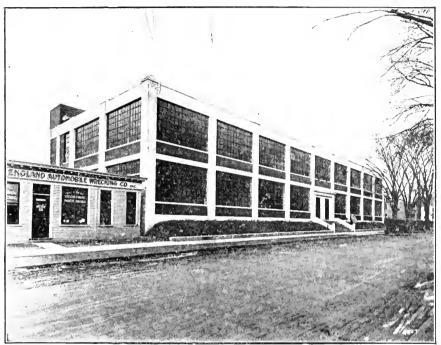


Group of houses built for the Pacific Mills at Columbia, S.C.

### FLYNT BUILDING AND CONSTRUCTION COMPANY

GENERAL OFFICES PALMER, MASS. CHARLOTTE, N. C. 418 PIEDMONT BLDG. NEW YORK OFFICE 30 CHURCH ST.

#### **BUILDING CONSTRUCTION**



Plant of Nichols Underwear Corporation, Bridgeport, Conn. Fletcher-Thompson, Inc., Engineers. Constructed by FLYNT.

### Four Generations of Superior Construction Service



Established in 1839, the FLYNT Building Organization has maintained an unbroken record of Superior Service to its clients.

The FLYNT Building Organization was the pioneer in Standard Mill Construction and with the advent of Reinforced Concrete, experts in that field were added to the staff and the FLYNT Organization has maintained its position as the Premier Industrial Building Organization.

FLYNT Built Textile Mills may be seen throughout the Eastern and Sonthern States and each is a standing testimonial to the high standard of materials and workmanship maintained by the organization.

Our interesting and valuable booklet about Factory Buildings will be sent upon request.

# CASPER RANGER CONSTRUCTION COMPANY

Main Office, HOLYOKE, MASS.

BOSTON SPRINGFIELD NEW YORK

W E OFFER you our 40 years' Experience and knowledge, and a skilled organization to help you solve the construction problems that are of vital importance now that business is returning to a condition of keen competition.

#### Ranger-built is well-built

#### CASPER RANGER CONSTRUCTION COMPANY

HOLYOKE, MASS.

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Industrial Homes, Hamilton-Carhartt Cotton Milfs

"It has been a great thing for us, being able to purchase these houses."

—Hamilton-Carhartt Cotton Mills.

Aladdin quickly and economically solves the housing problems of large industrial plants. Read the letter quoted from the Hamilton-Carhartt Cotton Mills:

THE ALADDIN COMPANY, Bay City, Mich.

Gentlemen: We are in receipt of your favor of February 7th, and will say in reply that we will be very glad for you to use our name in any character of advertising your houses that you see fit, as we have done a good deal of advertising for you free of charge, and I have personally put a number of mills in touch with your concern, who if they have not, very likely will in the near future take up with you the matter of industrial housing for their operatives.

It has been a great thing for us, being able to purchase these houses, as we were in bad shape for house room for our employees, and it was almost an impossibility to have cottages erected locally at a cost that the mill could afford, besides your houses being very much better adapted for our purpose than any we would have built for ourselves.

Yours very truly.

W. G. HENDERSON, Vice President and General Manager, Hamilton-Carhartt Cotton Mills, Detroit, Mich.

Aladdin saves 18% of the cost of lumber—30% of the labor cost—reduces skilled labor required—ships from the nearest timber region.

Wire, write or phone us for Aladdin Industrial Housing Catalog No. 194.

The Aladdin Co.

Offices and Mills at Bay City, Michigan Wilmington, North Carolina Hattiesborg, Mississippi Portland, Oregon Toronto, Ontario



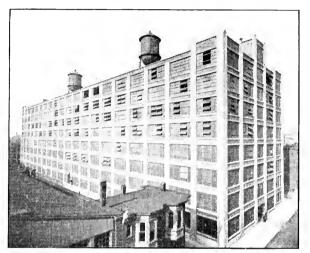
# Industrial Bousing

#### DAVID LUPTON'S SONS COMPANY

#### PHILADELPHIA

Chicago Cleveland Pittsburgh Detroit Boston Buffalo New York Atlanta

### ROLLED STEEL SASH FOR INDUSTRIAL BUILDINGS AND OFFICES



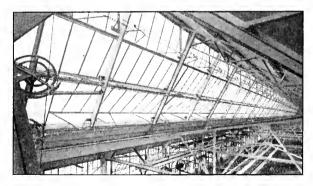
#### LUPTON PIVOTED FACTORY SASH

A high-grade pivoted-ventilator sash for mills and factories. Ventilators operated separately by peg stays or chains, or in groups by Pond Operating Device for mass-controlled ventilation.

SEE CATALOGUE 10-LSS.

#### POND CONTINUOUS SASH

Operated by hand or motor in lines up to hundreds of feet long. Used for masscontrolled weatherprotected ventilation. Write home office or nearest branch for literature on the uses of Lupton Sash Products.





#### THE VITROLITE COMPANY

CHAMBER OF COMMERCE BUILDING CHICAGO

REPRESENTATIVES IN ALL PRINCIPAL CITIES

# VITROLITE'S stainless white super-smooth surface affords an unequalled surface for inspection, sorting, folding and boxing tables.

Against such a background inspection is faster and more accurate and handling easier.

In the industrial lunch room Vitrolite tables give the utmost in cleanliness at the lowest maintenance cost. Send for a sample and special literature.



Vitrolite is a pure white substance far harder and stronger than marble. It is easily fitted to any table—or furnished as part of the equipment of standard lunch room tables, counters, and shelves. Used by hundreds of representative mills and factories.

CLEANLINESS

SPEED

ACCURACY



#### C. E. KNOEPPEL & CO., INC.

#### Industrial Engineers

#### "KNOEPPEL ORGANIZED SERVICE"

52 Vanderbilt Avenue.

New York

#### IS YOUR BUSINESS DIFFERENT?

#### Your Business IS Different Because—

It probably has more variable factors than others in the same industry, or—

Your industry may be more complex than others, or—

You may have a very different type of organization and personnel than others, or—

You probably have a greater variety in design, sizes, and styles of products than many, or—

Your sales opportunities may make it more difficult to develop a production schedule than some, or—

You may have more trouble than others in planning an even flow of production, or—

You probably have a greater diversity in kinds, sizes and grades of materials used than others, or—

You may have more difficulty in securing deliveries on your materials than some, or--

You may have more operations, some continuous others interrupted, than many, or—

Your great variety of operations may make it more difficult to secure accurate operation costs, or—

You may have a greater difficulty than many in maintaining a uniform force of workers—

#### All of which means that—

Every variable your business includes offers an additional argument in favor of coordination and control, and—

Every combination of these variables furnishes a place for an economic loss if not properly coordinated, and—

The more variables and greater number of factors the greater the opportunity for improvement, betterment, coordination and savings, and—

The greater the complexities and differences from all other business the less precedents there are to go by, and—

The less precedents there are the greater the returns which will result from investigation, researches and improvements.

We can show you how Knoeppel Organized Service particularly applies to complex businesses which are different. We have a very brief concise description of this service which we can send you.

#### We Can Describe Our Plan Briefly

## UNITED STATES TESTING COMPANY, Inc.

340 Hudson Street NEW YORK CUTY

BRANCH TESTING HOUSES

PHILADELPHIA 207 CHESTNUT ST. PATERSON 220 Ellison St.

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#### GENERAL TEXTILE TESTING

The quality and quantity of all textile merchandise from raw material to finished product can be accurately determined by proper tests. This company maintains public testing laboratories for all kinds of physical and chemical tests on textiles, dyestuffs, soaps, oils, mechanical rubber goods and mill supplies.

Domestic and Foreign Business Solicited.

#### CHEMICAL AND MICROSCOPICAL ANALYSES OF RAW MATERIALS AND FABRICS

Conditioning Boil-off Elasticity Tenacity Cohesion etc. Send for our booklet "Tests and Analyses"

Size
Measuring
Winding
Count
Twist
etc.

**SOAPS** 

OILS

DYESTUFFS

# THE MERCHANTS NATIONAL BANK OF BOSTON

Capital \$3,000,000



Surplus and Undivided Profits over \$5,800,000

#### Banking for the Cotton Trade

We are exceptionally well equipped to serve depositors in the cotton trade. Our relations with this industry are intimate and extensive, placing us in a position to understand its financial methods and requirements, and to co-operate with it in many ways outside the scope of routine banking.

Our Industrial Service Department is constantly conducting investigations and rendering reports as to raw cotton, yarns, and fabrics. This service is at the disposal of our clients.

We invite accounts of individuals, firms, and corporations.

# Some High Points

OF THE

### American Mutual

More than \$200,000.000 of textile payroll is insured by the American Mutual.

Of the 741 textile manufacturers who are among our policyholders, 147 have been with us for more than 10 years.

On our Board of Directors of 35 men, 19 are textile manufacturers.

For the past five years 94% of our policyholders have renewed their policies with us and our business has increased 530% in that period.

A saving of \$300 has been effected by every policyholder on each \$1,000 of premium which he has paid for protection.

American Mutual is the oldest, largest and strongest mutual casualty company in America.

Your copy of the booklet titled "30-30" which amplifies these high points will be mailed upon request.



OF BOSTON

### FEDERAL MUTUAL LIABILITY INSURANCE CO.

142 Berkeley Street, BOSTON, MASS.

Tel. Back Bay 9600

#### Organized 1905

Under Massachusetts Laws

Workmen's Compensation, Public Liability, Automobile, Teams, Landlords' and General Liability Insurance AT COST.

RATES. Minimum allowed by Insurance Department.

SERVICE that SATISFIES.

DIVIDEND 20% for 1920 business.

COMPARATIVE STATEMENT of Premium Income for three years:

1918	\$ 652,603.00
1919	\$1,004,696.00
1920	\$2,041,386.00

This remarkable growth is evidence of our policy of absolute fairness to both the policy holder and the employee. It is evidence, also, of intelligent co-operation with the assured in reducing his cost of Insurance, and an economical administration of the affairs of the Company.

REINSURANCE. Our Reinsurance contracts protect policy holders against catastrophe losses.

#### STEPHEN M. WELD & CO.

#### **COTTON MERCHANTS**

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#### Correspondents

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Given to Spinners' Requirements and Execution of Orders for Future Deliveries in New York, Liverpool, New Orleans, Havre and Alexandria.

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LOWELL, MASS.

Degrees of B.T.C. (Bachelor of Textile Chemistry) and B.T.E. (Bachelor of Textile Engineering) offered for completion of prescribed four-year courses.

Scientific and practical training in all processes of textile manufacture, including all commercial fibres. Complete three-year diploma courses in Cotton Manufacturing, Wool Manufacturing, Textile Designing.

#### POSITIONS ATTAINED BY DAY GRADUATES, 1899-1920

Directors of textile schools			1
Teachers			10
Mill vice-presidents			3
Mill treasurers and agents			17
Mill superintendents			39
Mill assistant superintendents			16
Mill foremen of departments			13
Assistants to agents and superintendents			
Mill auditors and accountants			$^{2}$
Mill clerks			$\frac{2}{1}$
Manufacturers			- 6
Managers			14
Textile designers and fabric experts			16
Purchasing agents			3
In commission houses			-4
Salesmen			13
Chemists, dyers, and chemical salesmen			65
In U.S. Civilian Service			7
Inspectors			3
Textile manufacturing, unassigned			18
Industrial engineering			12
Mill engineering			15
Civil engineering			1
Chemical engineering ,			$\frac{1}{2}$
Trade journalists			4
In business, textile distributing or incidental there	eto		7
Other business			28
Employment not known			35
Married women			4
Deceased			$-2\tilde{0}$
Total.			000

Certified graduates of High Schools and Academies admitted without examination.

For catalogue address Charles H. Eames, S.B., President, Lowell, Mass.

# THE NEW BEDFORD STATE TEXTILE SCHOOL

### AN INSTITUTE OF TEXTILE TECHNOLOGY

NEW BEDFORD, MASS.

WILLIAM E. HATCH, A.M. President

Frederic Taber Treasurer James O. Thompson, Jr. Clerk

Situated in New Bedford, Mass., a delightful residential city on Buzzards Bay, and the largest cotton manufacturing city of fine varus and fancy woven fabrics and novelties in the country.

Instruction given in every phase of cotton manufacturing from the raw cotton to the finished cloth by trained and experienced instructors in every department.

Day and Evening Classes

Tuition free to residents of Massachusetts

### Courses of Study:

GENERAL COTTON MANUFACTURING

CHEMISTRY, DYEING AND FINISHING

CARDING AND SPINNING

SEAMLESS HOSIERY KNITTING

DESIGNING

LATCH NEEDLE UNDERWEAR KNITTING

Diplomas awarded for regular courses three years in length. Shorter special courses may be arranged for which certificates are granted.

Free catalogue, giving in detail courses of study, terms of admission, etc., furnished on application.

The Pennsylvania Museum and School of Industrial Art

# PHILADELPHIA TEXTILE SCHOOL

E. W. France, Director

Broad and Pine Streets

# PHILADELPHIA, PENNSYLVANIA

Internationally accredited as an Institution which combines Theory and Practice in a Unique and Successful Manner.

Graduates of Former Years are Numbered Among the Leaders in the Textile Industry.

Recent Graduates are in Demand—in Manufacturing and Mercantile Pursuits.

### COTTON - WOOL - WORSTED - SILK

Two DIPLOMA COURSES of Three Years Each

REGULAR TEXTILE COURSE — Embracing all Classes of Textiles, and Including Chemistry, Dyeing, and Printing.

CHEMISTRY, DYEING, AND PRINTING COURSE— Embracing Inorganic and Organic Chemistry, Qualitative and Quantitative Analysis, Textile Chemistry, Chemistry of Dyeing. Analysis of Dyestuffs, and Dyeing.

Men whose time is restricted may enter for any of the following Abridged Courses:

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WOOL AND WORSTED COURSE — Two Years.

SILK COURSE - Two Years.

# 38th SEASON OPENS SEPTEMBER 21, 1921.

Details of all Courses of Study, as well as a statement of Fees, and other general information, are contained in the Illustrated Circular which will be sent on request.

Mr. France will consult with applicants, advising them as to suitable courses of study.

# RHODE ISLAND SCHOOL OF DESIGN

11 WATERMAN STREET, PROVIDENCE, R. I.

FOUNDED 1877

THE TEXTILE DEPARTMENT offers exceptional advantages to students—

First, in its location in the center of not one but all of the great textile industries, cotton, wool, and silk;

Second, in its training in Color and Design, given by specialists in its Design Department. This is supplemented by its Library and Museum, both rich in the Textiles of all periods;

Third, in its large amount of modern machinery, enabling each student actually to execute his designs.

### GENERAL TEXTILE COURSE

3 Years With Diploma

Weave Formation, Fabric Analysis, Calculations, Color and Design, Freehand and Mechanical Drawing, Warp Preparation, Hand-loom and Power-loom Weaving, Jacquard Design and Weaving, Loom Fixing, Elementary and Textile Chemistry, and Dyeing.

### EVENING COURSES

### With Certificate

Textile Design (Weave Formation, Fabric Analysis, Calculations, Warp Preparation and Weaving) 3 years; Elementary Textile Chemistry, 3 years (with diploma); Textile Dyeing, 2 years; Cotton Spinning, 2 years; Worsted Spinning (Theory) 1 year; Loom Fixing, 1 year.

In other departments of the School, courses of instruction are given in Drawing and Painting, Decorative Design, Modelling, Architecture, Mechanical Drawing, Jewelry and Silversmithing, and Normal Art.

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To any one interested in the work offered by this school, a catalogue, giving detailed information of all courses, will be sent upon request.

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American Steam Pump Co., Battle Creek, Mich. American Steam Pump Co., Battle Creek, Mic Bury Compressor Co., Erie, Pa. Chicago Pneumatic Tool Co., Chicago, Ill. Hardie-Tynes Mfg. Co., Birmingham, Ala. Hooven, Owens, Rentschler Co., Hamilton, O. Ingersoll-Rand Co., New York, N.Y. Nordberg Mfg. Co., Milwaukee, Wis. Norwalk Iron Works Co., So. Norwalk, Conn. Sullivan Machinery Co., Chicago, Ill. Vilter Mfg. Co., Milwaukee, Wis. Worthington Pump & Machinery Corp'n, New

### CONCRETE CONSTRUCTION

York, N.Y. (See Contractors)

### CONDENSERS

-Steam

Allis-Chalmers Mfg. Co., Milwaukee, Wis. p. 255

Alberger Pump & Condenser Co., New York, N.Y.

Baragwanath & Son, Wm., Chicago, Ill. Blake Pump & Condenser Co., Fitchburg, Mass. Davidson Co., M. T., New York, N.Y. Dean Bros, Steam Pump Works, Indianapolis,

Epping-Carpenter Pump Co., Pittsburgh, Pa. Schutte & Koerting Co., Philadelphia, Pa. Wheeler Condenser & Engineering Co., Carteret,

Wheeler Mfg. Co., Philadelphia, Pa. Wood & Co., R. D., Philadelphia, Pa. Worthington Pump & Machinery Corp'n, New York, N.Y.

### CONDENSORS

-Cotton

Woonsocket Machine & Press Co., Woon= socket, R.I. p. 188

### CONERS AND WINDERS

Foster Machine Co., Westfield, Mass. p. 203 Keystone Winding & Twisting Co., Philadelphia, Pa.

LeBon Bleach & Dye Works, Pawtucket, R.I. Scientific Textile Co., Morrisville, Pa. Textile Service Company, Philadelphia, Pa.

### CONES AND TUBES, PAPER

Alpha Cone Co., Philadelphia, Pa. Consolidated Paper Tube Co., Philadelphia, Pa. National Paper Tube Co., Philadelphia, Pa. Pairpoint Corporation, New Bedford, Mass. p. 206

Philadelphia Cone Co., Philadelphia, Pa. Sinclair Cone Co., Norristown, Pa. Universal Winding Co., Boston, Mass. p. 202

U. S. Mailing Case Co., Lowell, Mass.

### CONTRACTORS

-Building

Aberthaw Construction Co., Boston, Mass. pp. 270=1

Aladdin Company, The, Bay City, Mich. p. 275

Austin Co., The, Cleveland, O. Casper Ranger Construction Co., Holyoke, Mass. p. 274

Crowell-Lundoff-Little Co., The, Cleveland, O. Ferguson Co., John W., Paterson, N.J. Ferro Concrete Construction Co., Cincinnati, O. Flynt Building & Construction Co., Palmer,

Mass. p. 273 Ford, Bacon & Davis, New York, N.Y. General Building Company, Boston, Mass. p. 272

Guarantee Construction Co., New York, N.Y. Hennchique Construction Co., New York, N.Y. Ley & Co., Inc., Fred T., Springfield, Mass. Robinson, Dwight P., New York, N.Y. Stone & Webster, Boston, Mass. p. 269 Turner Construction Co., New York, N.Y. White & Co., Inc., J. G., New York, N.Y.

### CONTROLLERS

### —Electric

Cutler-Hammer Mfg. Co., Milwaukee, Wis. Eieetric Controller & Mfg. Co., Cleveland, O. Fort Wayne Engineering & Mfg. Co., Fort Wayne, Ind. General Electric Co., Schenectady, N.Y. pp.

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Industrial Controller Co., Milwaukee, Wis. Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. p. 258

### CONVEYING MACHINERY

Cotton

H. & B. American Machine Co., Pawtucket, R.I. p. 183 Saco-Lowell Shops, Boston, Mass. p. 187 Sturtevant Co., B. F., Boston, Mass. Whitin Machine Works, Whitinsville, Mass. p. 184

Woonsocket Machine & Press Co., Woonsocket, R.I. p. 188

### CONVEYING MACHINERY

American Conveyor Co., Chicago, Ill. American Conveyor Co., Chicago, Ill.
Alvey Mfg. Co., St. Louis, Mo.
Barber-Greene Co., Aurora, Ill.
Caldwell & Son Co., H. W., Chicago, Ill.
Chain Belt Co., Milwaukee, Wis.
Gifford-Wood Co., Hudson, N.Y.
Hill Clutch Co., Cleveland, O.
Hunt Co., Inc., C. W., West Brighton, N.Y.
Jones Foundry & Machine Co., Chicago, Ill.
Lamson Co., The, Boston, Mass.
Link-Belt Co., Chicago, Ill. p. 259
Mathews Gravity Carrier Co., Ellwood City, Pa.
Robins Conveying Belt Co., New York, N.Y.
Weller Mig. Co., Chicago, Ill. Wilcox Engineering Co., Saginaw, Mich.

### COOLING TOWERS (Natural and Forced Draft)

Cooling Tower Co., New York, N.Y. Seymour, Jr., J. M., Newark, N.J. Wheeler Condenser & Engineering Co., Carteret,

Wheeler Co., C. H., No. Philadelphia, Pa. Worthington Pump & Machinery Corp'n, New York, N.Y.

### COP TUBES

(See Cones)

### COPPER PRINTING ROLLERS

Taunton-New Bedford Copper Co., New Bedford, Mass

Textile=Finishing Machinery Co., The, Providence, R.I. p. 223

### COPPERSMITHS

Badger & Sons Co., E. B., Boston, Mass. Butterworth, H. W., & Sons Co., Philadel-phia, Pa. p. 224 Textile-Finishing Machinery Co., The, Prov-idence, R.I. p. 223

### COTTON MACHINERY

Abington Textile Machinery Trustees, Abington,

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Campbell Mfg. Co., Worcester, Mass. p. 213 COTTON MERCHANTS Crompton & Knowles Loom Wks., Worces-Weld, Stephen M., & Co., New York, N.Y. p. ter, Mass. p. 210 Curtis & Marble Machine Co., Worcester, COUNTERS p. 228 Mass. Davis & Furber Machine Co., No. Andover, Bristol Co., Waterbury, Conn. Brown Instrument Co., Philadelphia, Pa. Mass. p. 226 Dixon Lubricating Saddle Co., Bristol, R.I. Brown Instrument Co., runiageipina, r.a. Durant Mig. Co., Milwaukee, Wis. Lonergan Co., J. E., Philadelphia, Pa. Root & Co., C. J., Bristol, Conn. Schaeffer & Budenberg Mig. Co., Brooklyn, N.Y. Draper Corporation, Hopedale, Mass. 185, 209 Easton & Burnham Machine Co., Pawtucket, R.I. p. 190 Elliott & Hall, Worcester, Mass, Veeder Mfg. Co., Hartford, Conn. COUNTERSHAFTS Emmons Loom Mass. p. 215 Harness Co., Lawrence, American Tool & Machine Co., Boston, Mass. Entwistle Co., T. C., Lowell, Mass, Caldwell & Son Co., H. W., Chicago, Ill. Dodge Sales & Engineering Co., Mishawaka, Ind. Fales & Jenks Machine Co., Pawtucket, Hill Clutch Co., Cleveland, O. R.I. p. 189 Jones Foundry & Machine Co., W. A., Chicago. Firth, Wm., Boston, Mass. p. 191 Foster Machine Co., Westfield, Mass. p. 203 Ill. Weller Mfg. Co., Chicago, Ill. Wood's Sons Co., T. B., Chambersburg, Pa. Greist Manufacturing Co., The, New Haven, Conn. p. 199 COUNTING MACHINES Harrison, Herbert, Boston, Mass. H. & B. American Machine Co., Pawtucket, Durant Manufacturing Co., Milwaukee, Wis. National Scale Co., Chicopee Falls, Mass. Root, C. J., & Co., Bristol, Conn. Veeder Mfg. Co., Hartford, Com. R.I. p. 183 Hetherington & Son, John, Ltd., Manchester, Eng. p. 193 Hopedale Manufacturing Co., Milford, Mass. p. 212 COUPLINGS -Shaft Howard Bros. Mfg. Co., Worcester, Mass. American Tool & Machine Co., Boston, Mass. American Tool & Mactime Co., Boston, Mass. Bond Co., Charles, Philadelphia, Pa. Brown Co., A. & F., New York, N.Y. Caldwell & Son Co., H. W., Chicago, Ill. Chain Belt Co., Milwaukee, Wis. Dodge Sales & Engineering Co., Mishawaka, Ind. Edit. Chuk & Washinger Co. (Chechona Edit. p. 194 p. 194 Houghton, L. T., Worcester, Mass. Leigh & Butler, Boston, Mass. p. 192 Lever Co., Inc., Oswald, Philadelphia, Pa. Leyland & Co., Thos., Readville, Mass. Mason Machine Works, Taunton, Mass. p. Falls Clutch & Machinery Co., Cuyahoga Falls, Metallic Drawing Roll Co., The, Indian Orehard. Hill Clutch Co., Cleveland, O. Mass. Jones Foundry & Machine Co., W. A., Chicago. National Ring Traveler Co., Providence, R.I. p. 201 Link=Belt Co., Chicago, III. p. 259 Medart Patent Pulley Co., St. Louis, Mo Pairpoint Corporation, New Bedford, Mass. 206 Royersford Foundry & Machine Co., Philadel-Parks & Woolson Machine Co., Springfield, phia, Pa. erkins Company, B. F., Holyoke, Mass. p. 227 Weller Mfg. Co., Chicago, Ill. Perkins Wood's Sons Co., T. B., Chambersburg, Pa. Phila. Drying Machinery Co., Philadelphia, Pa. Proctor & Schwartz, Philadelphia, Pa. COVERINGS Proctor & Schwartz, Philadelphia, p. 225 Roy & Son Co., B. S., Worcester, Mass. 195 -Steam Pipe American District Steam Co., No. Tonawanda, Ñ.Y N.Y.
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Ehret Magnesia Mfg. Co., Valley Forge, Pa.
Fibre Cell Asbestos Mfg. Co., Chicago, Ill.
Franklin Mfg. Co., Franklin, Pa.
Johns-Manville Co., Il. W., New York, N.Y.
Keasbey Co., Robert A., Ambler, Pa.
Magnesia Association of America, Philadelphia,
Do. Saco-Lowell Shops, Boston, Mass. p. 187 Sargent's Sons Corp., C. G., Graniteville, Mass. Shambow Shuttle Co., Woonsocket, R. f. Smith & Furbush Machine Co., Philadel-phia, Pa. p. 221 Stafford Co., The, Readville, Mass. p. 211 Steel Heddle Mfg. Co., Philadelphia, Pa. p. 214 Textile=Finishing Machinery Co., The, Prov= Pa. National Air Cell Covering Co., Jersey City, N.J. Nightingale & Childs Co., Boston, Mass. Standard Asbestos Mfg. Co., Chicago, Ill. idence, R.I. p. 223 Universal Winding Co., Boston, Mass. p. Wyckoff & Son Co., A., Elmira, N.Y. US Bobbin & Shuttle Co., Providence, R.I. p. 216 American Crayon Co., Waltham, Mass, Binney & Smith Co., New York, N.Y. Dixon Crucible Co., Jos., Jersey City, N.J. Howe Mill Crayon Co., Lowell, Mass. Lowell Crayon Co., Lowell, Mass. U. S. Ring Traveler Co., Providence, R.I. p. 200 Warp Compressing Machine Co., Worcester, Mass. p. 207 Whitin Machine Works, Whitinsville, Mass. Whitinsville Spinning Ring Co., Whitins= Warp Compressing Machine Co., Worcester,

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CUTTING MACHINES, CLOTH

Cameron Machine Co., Brooklyn, N.Y. Eastman Machine Co., Buffalo, N.Y.

ville, Mass. p. 198 Woonsocket Mach. & Press Co., Woonsocket,

Napping Machinery Co., Woon-

R.1. p. 188 Woonsocket

socket, R.I.

Grand Rapids Tex. Machy, Co., Grand Rapids,

Ireland Mach. & Fdry. Co., Norwich, N.Y Metropolitan Sewing Mach. Co., Nyack, N.Y.

### DAMPENERS

American Moistening Co., Boston, Mass. p. 234

### DEXTRINE

Arnold, Hoffman & Co., Inc., Providence,

R.I. p. 238 Nicol, J. M. & J. S., North Paterson, N.J. Stein, Hirsh & Co., New York, N.Y. Tanner & Co., Charles, Providence, R.I.

Crompton & Knowles Loom Wks., Worces=

ter, Mass. p. 210 Halton's Sons, Thomas, Philadelphia, Pa. Mason Machine Works, Taunton, Mass. 186

Stafford Co., The, Readville, Mass. p. 211 Whitin Machine Works, Whitinsville, Mass. p. 184

DOBBY CORDS—BRAIDED HARNESS Jacobs Mfg. Co., E. H., Danielson, Conn. p. 218

### DOFFING CARS

Rogers Fibre Co., Boston, Mass.

DOUBLING AND ROLLING MACHINES

Butterworth & Sons Co., H. W., Philadel-phia, Pa. p. 224 phia, Pa. p. 224 Curtis & Marble Machine Co., Worcester,

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Textile=Finishing Machinery Co., The, Prov= idence, R.I. p. 223

DOUBLING AND WINDING MACHINES Windle, J. E., Woreester, Mass.

### DRAWING FRAMES

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### DRIVES

—Silent Chain

Link-Belt Co., Chicago, III. p. 259 Morse Chain Co., Ithaca, N.Y. pp pp. 260-1

DROP WIRES, LOOM

Greist Mfg. Co., The, New Haven, Conn. p. 199

Hopedale Mfg. Co., Milford, Mass. p. 212

### DRYING MACHINERY

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American Blower Co., Detroit, Mich.

American Biower Co., Detroit, Mich, Butterworth & Sons Co., H. W., Philadel-phia, Pa. p. 224 Drying Systems, Inc., Chicago, Ill. New York Blower Co., Chicago, Ill. Philadelphia Drying Machinery Co., Philadel-phia, Pa.

Proctor Schwartz, Philadelphia, Pa. & p. 225

Sturtevant Co., B. F., Boston, Mass. Textile=Finishing Machinery Co., The, Prov= idence, R.1. p. 223

### DUST COLLECTORS

Buffalo Forge Co., Buffalo, N.Y. p. 235 Buffalo Steam Pump Co., Buffalo, N.Y. Firth, Wm., Boston, Mass. p. 191 Phila, Drying Machinery Co., Philadelphia, Pa. Sturtevant Co., B. F., Hyde Park, Boston, Mass.

du Pont de Nemours & Co., E. I., Wilming= ton, Del. p. 237

# YEING, DRYING, BLEACHING AND FINISHING MACHINERY

American Laundry Machinery Co., Cincinnati, O. American Tool & Machine Co., Boston, Mass.

American 1001 & Machine Co., Boston, Mass. Bailey, Frank, Camden, N.J.
Buffalo Forge Co., Buffalo, N.Y. p. 235
Butterworth, H. W., & Sons Co., Philadelphia, Pa. p. 224
Cocker Machine & Foundry Co., Gastonia, N.C.

Curtis & Marble Machine Co., Worcester,

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Delahunty Dyeing Machine Co., Pittston, Pa.
Dinsmore Mfg. Co., The, Salem, Mass. p. 222

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Electro Chemical Co., Dayton, O.
Elliott & Hall, Worcester, Mass.
Franklin Process Co., Providence, R.I.
Hussong Dyeing Machine Co., Groveville, N.J.
Kenyon & Son, D. R., Raritan, N.J.
Klauder-Weldon Dyeing Mach. Co., Yardley,

Leigh & Butler, Boston, Mass. p. 192
Paramount Hos'y Form Dry'g Co., Chicago, Ill.
Parks & Woolson Machine Co., Springfield,
Vt. p. 229
Perkins & Son, Inc., B. F., Holyoke, Mass.,
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Phylo Dryling Machines Co., Phylonia M. Pa

Phila. Drying Machinery Co., Philadelphia, Pa. Proctor & Schwartz, Philadelphia, Pa. p. 225 Reliance Machine Works, Philadelphia, Pa. Roy & Son Co., B. S., Worcester, Mass.

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Salem Iron Works, Winston-Salem, N.C.
Sargent's Sons Corp., C. G., Graniteville, Mass.
Smith, Drum & Co., Philadelphia, Pa.
Sturtevant Co., B. F., Boston, Mass.
Suter, Alfred, New York, N.Y.
Tait, G. W., Providence, R.I.
Textile-Finishing Machinery Co., The, Providence, R.I. p. 223
Tolhurst Machine Works, Troy, N.Y.

### DYE KETTLES

Allen Sons Co., Wm., Worcester, Mass.
Butterworth & Sons Co., H. W., Philadelphia, Pa. p. 224
Delahunty Dyeing Machine Co., Pittston, Pa.
Hunt Machine Co., Rodney, Orange, Mass.
Textile-Finishing Machinery Co., The, Prov

idence, R.I. p. 223

### DVE STICKS

Bailey, Frank, Cedar Brook, N.J. Klauder-Weldon Dyeing Machine Co., Yardley,

Pa. Philadelphia Drying Machinery Co., Philadelphia, Pa.

### DYESTUFFS AND CHEMICALS

Adelphia Dye & Chemical Co., Philadelphia, Pa.

American Aniline Products, Inc., New York, N.Y. American Dyewood Co., Boston, Mass.

Arabol Mfg. Co., New York, N.Y. Arnold, Hoffman & Co., Inc., Providence, Arnold, Hoffman & Co., Inc., 1767.
R.I. p. 238
Bayer Co., Inc., The, New York, N.Y.
Borne, Scrymser Co., New York, N.Y.
Bosson & Lane, Atlantic, Mass. p. 2.
Cassella Color Co., New York, N.Y. p. 240 p. 241 Chemical Co. of America, Inc., New York, N.Y. Cronkhite Co., The Leonard W., Boston, Mass. du Pont de Nemours & Co., E. I., Wilming=

ton, Del. p. 237 Gibson, F. Swift, Philadelphia, Pa. Klipstein & Co., A., New York, N.Y. Kuttroff, Pickhardt & Co., New York, N.Y. p. 239

National Oil Products Co., Harrison, N.J. Roessler & Hasslacher Chemical Co., New York, Saxe Chemical Co., New York, N.Y. Solvay Process Co., The, Schenectady, N.Y. Solvay P

Sterling Color Co., Inc., New York, N.Y. Wing & Evans, New York, N.Y. p. 243 Wolf & Co., Jacques, Passaic, N.J.

### ECONOMIZERS, FUEL

Green Fuel Economizer Co., New York, N.Y. Sturtevant Co., B. F., Boston, Mass.

American Injector Co., Detroit, Mich. Hancock Inspirator Co., New York, N.Y. Hayden & Derby Mig. Co., New York, N.Y. Penberthy Injector Co., Detroit, Mich.

### ELECTRICAL EQUIPMENT

Allis-Chalmers Mfg. Co., Milwaukee, Wis. p. 255 General Electric Co., Schenectady, N.Y. pp. 256=7 Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. p. 258

### ELEVATORS

### -Passenger and Freight

Albro-Clem Elevator Co., Philadelphia, Pa. American Elevator & Machine Co., Louisville, Kv.

Gurney Elevator Co., New York, N.Y.
McLauthlin Co., Geo. T., Boston, Mass.
Mason Co., Inc., Volney W., Providence, R.I.
Moore & Wyman Elevator & Machine Works,
Boston, Mass. Boston, Mass.
Otis Elevator Co., New York, N.Y.
Ridgway & Son Co., Craig, Coatesville, Pa.
Standard Electric & Elev. Co., Baltimore, Md.
Standard Plunger Elevator Co., Worcester, Mass.
Wetherill & Co., Inc., Robt., Chester, Pa.
Wheeler-McDowell Elevator Co., New York, N.Y.

-Portable

Economy Engineering Co., Chicago, Ill. Y. Revolving Portable Elevator Co., Jersey City, N.J.

### ENGINEERS

### -Consulting

— Consulting
(See also Engineers, Industrial)
Archer and Associates, W. G., New York, N.Y.
Cary, Albert A., New York, N.Y.
Emerson Company, New York, N.Y.
Estes, Incorporated, L. V., Chicago, Ill.
Fish, Charles H., Boston, Mass.
Fletcher-Thompson, Inc., Bridgeport, Conn.
French & Hubbard, Boston, Mass.
Green Co., Samuel M., Springfield, Mass.
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Hooper-Falkenen, Engineering Co. N. V. Hooper-Falkenau Engineering Co., New York,

Jackson, D. C. & Wm. B., Boston, Mass. Little, Inc., Arthur D., Boston, Mass.

Main, Charles T., Boston, Mass. p. 265 Meyer, Jr., Henry C., New York, N.Y. Monks & Johnson, Boston, Mass. p. 266 Moore, Frederick C., Cleveland, O., Sanderson & Porter, New York, N.Y. Sirrine, J. E., & Company, Greenville, S. C. p. 268 Suter, Alfred, New York, N.Y. Thompson & Lichtner, Boston, Mass. Woodwell, J. E., New York, N.Y.

### ENGINEERS

### -Industrial

—Industrial
Allen & Co., A. M., Cleveland, O.
Arnold Company, The, New York, N.Y.
Chase, Frank D., Chicago, Ill.
Baker, Sutton & Harrison, New York, N.Y.
Day & Zimmenson, Philadelphia, Pa.
Dean, Inc., Francis W., Boston, Mass.
DeWolf & Co., John O., Boston, Mass.
Dyer, W. E. S., Philadelphia, Pa.
Fletcher, Thompson, Inc., Bridgeport, Conn.
Ford, Bacon & Davis, New York, N.Y.
French & Hubbard, Boston, Mass.
Gardner & Lindberg, Chicago, Ill. Gardner & Lindberg, Chicago, Ill. Gray, Arthur F., Boston, Mass. Green Company, Samuel M., Springfield, Mass. p. 264 Hooper-Falkenau Engineering Co., New York, N.Y. Kimball, Herbert S., Boston, Mass. Knoeppel & Co., C. E., New York, N.Y. p. 278 Lockwood, Greene & Co., Boston, Mass. p. 267 p. 207
Main, Charles T., Boston, Mass.
Marvell, Edward I., Fall River, Mass.
Makepeace, C. R., Providence, R.I.
Monks & Johnson, Boston, Mass. Monks & Johnson, Boston, Mass. p. 266 Peuckert & Wunder, Philadelphia, Pa. Prather, H. B., Cleveland, O. Robinson, Dwight P., New York, N.Y. Scofield Engineering Company, Philadelphia, Pa. Scabury, Dwight, Pawtucket, R.I. Sellers, Philip, New Haven, Conn. Sheldon Co., F. P., Providence, R.I. Sirrine, J. E., & Company, Greenville, S.C. p. 268 p. 268
Stevens, John A., Lowell, Mass. p. 263
Stevens, John A., Lowell, Mass. p. 269
Suck, Adolph, Hyde Park, Mass.
Tenney, Clas. II., & Co., Boston, Mass,
Watson Engineering Co., Cleveland, O.
White & Co., Inc., J. C., New York, N.Y.
Woodmansee-Davidson Engrg. Co., Chicago, Ill.

### ENGINES

### —Steam

—steam
Allis-Chalmers Mfg. Co., Milwaukee, Wis. p. 255
Ball Engine Co., Erie, Pa.
Bass Foundry & Machine Co., Fort Wayne, Ind. Brown Engine Co., Fitchburg, Mass.
Erie City Iron Works, Erie, Pa.
Fitchburg Steam Engine Co., Fitchburg, Mass.
Fulton Iron Works Co., St. Louis, Mo.
Hardie-Tynes Mfg. Co., Birmigham, Ala.
Harrisburg Foundry & Machine Works, Harrisburg, Pa. burg, Pa. Harris-Corliss Engine & Machine Co., Providence, R.I.
Hewes & Phillips Iron Works, Newark, N.J.
Hooven, Owens, Rentschler Co., Hamilton, O.
Houston, Stanwood & Gamble Co., Cincinnati, O. Houston, Stanwood & Camble Co., Chreinnati, O. Ide & Sons, A. L., Springfield, Ill. Lane & Bodley Co., Cincinnati, O. Mesta Machine Co., Pittsburgh, Pa. Murray Iron Works Co., Burlington, Ia. Nordberg Mfg. Co., Milwaukee, Wis. Providence Engineering Corp'n, Providence, R.I. Reeves-Cubberly Engine Co., Trenton, N.J. Ridgway Dynamo & Engine Co., Ridgway, Pa. Rollins Engine Co., Nashua, N.H.

Nomins Engine Co., Nashua, N.H. Skinner Engine Co., Erie, Pa. Sturtevant Co., B. F., Boston, Mass. Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. p. 258

Wetherill & Co., Inc., Robt., Chester, Pa.

Allis-Chalmers Mfg. Co., Milwaukee, Wis. p. 255

-Oil

Allis=Chalmers Mfg. Co., Milwaukee, Wis. p. 255

### **EXHAUST HEADS**

Burt Mfg. Co., Akron, O. Burt Mig. Co., Akron, O.
Direct Separator Co., Syraeuse, N.Y.
Hoppes Mig. Co., The, Springfield, O.
Massachusetts Blower Co., Watertown, Mass.
Ohio Blower Co., Cleveland, O.
Patterson & Co., Frank L., New York, N.Y.
Pittsburgh Valve, Foundry & Const. Co., Pittsburgh, Pa. Sturtevant Co., B. F., Boston, Mass.

### EXPANDERS, CLOTH

Leyland, Thos., & Co., Readville, Mass.

### EXPANSION JOINTS

Alberger Pump & Condenser Co., New York, Badger & Sons, E. B., Boston, Mass. Tyler Underground Heating System, Pittsburgh,

### EXTRACTORS, HYDRO-

(See Hydro-Extractors)

### EXTRACTS

(See Dyestuffs & Chemicals)

### FANS, EXHAUST

FANS, EXHAUSI
American Blower Co., Detroit, Mich.
Barney Ventilating Fan Works, Boston, Mass.
Buffalo Forge Co., Buffalo, N.Y. p. 235
Dixie Mfg. Co., Inc., Baltimore, Md.
Garden City Fan Co., Chicago, Ill.
Green Fuel Economizer Co., New York, N.Y.
Howard & Morse, New York, N.Y.
Indiana Fan Co., Indianapolis, Ind.
Massachusetts Blower Co., Watertown, Mass.
National Blow Pipe & Mfg. Co., Ltd., New
Orleans, La. Orleans, La.

Perkins & Son, B. F., Holyoke, Mass. p. 227

Philadelphia Drying Machinery Co., Philadelphia, Pa.

Sterling Blower Co., Hartford, Conn. Sturtevant Co., B. F., Boston, Mass. Tolhurst Machine Works, Troy, N.Y.

### FEEDS, AUTOMATIC

Curtis & Marble Mach. Co., Worcester, p. 228 Mass. Phila. Drying Machinery Co., Philadelphia, Pa.

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Proctor & Schwartz, Philadelphia, Pa. p. 225
Saco-Lowell Shops, Boston, Mass. p. 187
Sargent's Sons Corp., C. G., Graniteville, Mass. Schofield, Wm., Co., Manayunk, Philadelphia, Pa.

Smith & Furbush Machine Co., Philadel=

phia, Pa. p. 221 Tatham, William, Ltd., Rochdale, England (Wm. Firth, Agent). p. 191 Whitin Machine Works, Whitinsville, Mass.

p. 184 Woonsocket Mach. & Press Co., Woonsocket, R.I. p. 188

### FENCES, WIRE AND IRON

Anchor Post Iron Works, New York, N.Y. Cyclone Fence Co., Wankegan, Ill. Enterprise Iron Works, Indianapolis, Ind. Page Steel & Wire Co., Adrian, Mich. Stewart Iron Works Co., Covington, Ky. Wickwire-Spencer Steel Corp., Worcester, Mass.

### FILTERS

-Water

American Water Softener Co., Philadelphia, Pa. Beggs & Co., James, New York, N.Y. Casey-Hedges Co., Chattanooga, Tenn. Harrison Safety Boiler Works, Philadelphia, Pa.

Hungerford & Terry, Inc., Philadelphia, Pa. Hygeia Filter Co., Detroit, Mich. International Filter Co., Chicago, Ill. Leigh & Butler, Boston, Mass. p. 192 Loomis-Manning Filter Distributing Co., Phila-

delphia, Pa.

New York Continental Jewell Filtration Co.,
New York, N.Y.

Permutit Co., New York, N.Y.

Pittsburgh Filter Mig. Co., Pittsburgh, Pa.
Roberts Filter Mig. Co., Darby, Pa.

Scaife & Sons Co., Wm. B., Pittsburgh, Pa. p. 250

### FINISHING MACHINERY

(See also Dyeing, Drying, Bleaching and Finishing)

Butterworth & Sons Co., H. W., Philadel-phia, Pa. p. 224 Dinsmore Mfg. Co., The, Salem, Mass. p. 222

Proctor & Schwartz, Philadelphia, Pa. p. 225 Textile-Finishing Machinery Co., The, Providence, R.I. p. 223

### FIRE DOOR FIXTURES (Automatic)

Automatic Sprinkler Co. of America, New York, N.Y. Coburn Trolley Track Mfg. Co., Holyoke, Mass. Richards-Wilcox Mfg. Co., Aurora, Ill. Stowell Co., So. Milwaukee, Wis.

### FIRE EXTINGUISHERS

American-La France Fire Engine Co, Inc., Elmira, N.Y. Automatic Sprinkler Co. of America, New York, N.Y. Johns-Manville Co., H. W., New York, N.Y. Montgomery & Co., Inc., New York, N.Y.

### FLVERS

Bodden, Wm., & Son, Ltd., Providence, R.I. Firth, William, Boston, Mass. p. 191 H. & B. American Machine Co., Pawtucket, R.I. p. 183
Southern Spindle & Flyer Co., Charlotte, N.C. p. 197
Whitin Machine Works, Whitinsville, Mass.

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### FLYER PRESSERS

Southern Spindle & Flyer Co., Charlotte, N.C. p. 197

### FOLDING MACHINERY

Curtis & Marble Machine Co., Worcester, Mass. p. 228 Effiot & Hall, Worcester, Mass.

### FRAMES, UNIVERSAL

Steel Heddle Mfg. Co., Philadelphia, Pa. p. 214

### FUEL ECONOMIZERS

(See Economizers, Fuel)

D & W Fuse Co., Providence, R.I. Detroit Fuse & Mfg. Co., Detroit, Mich. Economy Fuse & Mfg. Co., Chicago, Ill. General Electric Co., Schenectady, N.Y. pp. 256-7 Johns-Manville Co., II. W., New York, N.Y. Johns-Pratt Co., Hartford, Conn. Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. p. 258

Kuttroff, Pickhardt & Co., Inc., New York, N.Y. p. 239
National Aniline & Chemical Co., Inc., New York, N.Y. p. 236

### GARNETT GRINDERS

(See Grinding Machinery)

### GASKETS

(See Packing)

### GASSING MACHINES

(See Singeing Machines)

### GAUGE GLASSES

Ashton Valve Co., Cambridge, Mass. Chesterton Co., A. W., Boston, Mass. Crane Co., Chicago, III. Durable Mfg. Co., New York, N.Y. Magee Valve Co., Inc., New York, N.Y.

### GAUGES

### -Pressure

American Steam Gauge & Valve Mfg. Co., Boston, Mass, Asheroft Mfg. Co., New York, N.Y. Ashton Valve Co., Cambridge, Mass, Bacharach Industrial Instrument Co., Pittsburgh, Pa.

Pa.
Bristol Co., Waterbury, Conn.
Brown Instrument Co., Philadelphia, Pa.
Crosby Steam Gage & Valve Co., Boston, Mass.
Foxboro Co., Foxboro, Mass.
Lonergan Co., J. E., Philadelphia, Pa.
Pittsburgh Gage & Supply Co., Pittsburgh, Pa.
Precision Instrument Co., Detroit, Mich.
Schaeffer & Bulanharg Mfg. Co., Brooklyn, N.Y. Schaeffer & Budenberg Mfg. Co., Brooklyn, N.Y. Star Brass Mfg. Co., Boston, Mass. Tagliabue Mfg. Co., C. J., Brooklyn, N.Y. Uehling Instrument Co., New York, N.Y. United States Gauge Co., New York, N.Y.

### GEARS

### —Silent Chain

Morse Chain Co., Ithaca, N.Y. pp. 260-1

### GENERATING SETS

American Blower Co., Detroit, Mich. General Electric Co., Schenectady, N.Y. pp. 256-7

250-7 Ide & Sons, A. L., Springfield, Ill. Sturtevant Co., B. F., Boston, Mass. Terry Steam Turbine Co., Hartford, Conn. Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. p. 258

### GENERATORS

### -Electric

Allis-Chalmers Mfg. Co., Milwaukee, Wis. p. 255 C & C Electric & Mfg. Co., Garwood, N.J. Crocker-Wheeler Co., Ampere, N.J. De Laval Steam Turbine Co., Trenton, N.J. Emerson Electric Mfg. Co., St. Louis, Mo.

General Electric Co., Schenectady, N.Y. pp. 256 - 7

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Reliance Electric & Eng. Co., Cleveland, O.
Robbins & Myers Co., Springfield, O.
Sprague Electric Works, New York, N.Y.
Sturtevant Co., B. F., Boston, Mass.
Western Electric Co., Inc., New York, N.Y.
Westinghouse Electric & Mfg. Co., East

Westinghouse Electric & Pittsburgh, Pa. p. 258

Curtis & Marble Machine Co., Worcester, Mass. p. 228 Hunt Machine Co., Rodney, Orange, Mass. Parks & Woolson Machine Co., Springfield, Vt. p. 229

### GOVERNORS

### -Engine and Pump

—Engine and Pump Fisher Governor Co., Marshalltown, Ia. Foster Engineering Co., Newark, N.J. Gardner Governor Co., Quiney, Ill. Houston, Stanwood & Gamble Co., Cincinnati, O. Ideal Automatic Governor Co., Newark, N.J. Northern Equipment Co., Erie, Pa. Pickering Governor Co., Portland, Conn. Richardson-Phenix Co., Milwaukee, Wis. Waters Governor Co., Lawrence, Mass.

### GRATES

### -Shaking

Bass Foundry & Machine Co., Fort Wayne, Ind. Casey-Hedges Co., Chattanooga, Tenn. Dillon Steam Boiler Works, D. M., Fitchburg, Marse

Mass,
International Engineering Works, Inc.,
Framingham, Mass. p. 247
Keeler Co., E., Williamsport, Pa.
McClave-Brooks Co., Scranton, Pa.
Marshall Foundry Co., Pittsburgh, Pa.
Marshall Foundry Co., Pittsburgh, Pa.
Martin Grate Co., Chicago, Ill.
New England Roller Grate Co., Springfield, Mass.
Shelvin Engineering Co., Inc., New York, N.Y.
Springfield Boiler Co., Springfield, Ill.
Wickes Boiler Co., The, Saginaw, Mich. p.
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### GREASE

Albany Lubricating Co., New York, N.Y. Houghton & Co., E. F., Philadelphia, Pa. Keystone Lubricating Co., Philadelphia, Pa. New York & New Jersey Lubricant Co., New York, N.Y. York, N.Y.
Philadelphia Grease Mfg. Co., Philadelphia, Pa.
Standard Oil Co. of New York, New York, N.Y.
Swan & Finch, New York, N.Y.
Texas Co., New York, N.Y.
P. 245
Valvoline Oil Co., New York, N.Y.
Wolverine Lubricants Co. of N. Y., New York,
N.Y.

### GREASES

### —Textile

phia, Pa. p. 221

Borne, Scrymser Co., New York, N.Y. p. 240 Jackson & Co., Ellis, Philadelphia, Pa.

### GRINDING MACHINERY, CARD

Davis & Furber Mach. Co., North Andover, Davis & Furber Mach. Co., North Andover, Mass. p. 226
Easton & Burnham Machine Co., Pawtucket, R.I. p. 190
Entwistle, T. C., Co., Lowell, Mass.
Firth, Wm., Boston, Mass. p. 191
Hubbard Machine Co., Hartford, Conn.
Leigh & Butler, Boston, Mass. p. 192
Roy & Son Co., B. S., Worcester, Mass. p. 195
195. S. Furbuch, Machine Co., Philadal. Smith & Furbush Machine Co., PhiladelWhitin Machine Works, Whitinsville, Mass. p. 184

### GUIDERS, CLOTH

Butterworth & Sons Co., H. W., Philadel= phia, Pa. p. 224 Leyland, Thos., & Co., Readville, Mass. Textile-Finishing Machinery Co., The, Providence, R.I. p. 223

### GHMS

(See Sizing, Starch and Gums)

### HANGERS

### -Shaft

Bond Co., Charles, Philadelphia, Pa. Brown Co., A. & F., New York, N.Y. Chain Belt Co., Milwaukee, Wis. Dodge Sales & Engineering Co., Mishawaka, Ind. Falls Clutch & Machinery Co., Cuyahoga Falls,

Hill Clutch Co., Cleveland, O. Hyatt Roller Bearing Co., New York, N.Y.

nyatt Roher bearing Co., New York, N. 7. p. 262 Link-Belt Co., Chicago, III. p. 259 Medart Patent Pulley Co., St. Louis, Mo. Royersford Foundry & Machine Co., Philadelphia, Pa. Weller Mfg. Co., Chicago, Ill.

### HARNESSES

Crompton & Knowles Loom Wks., Worcester, Mass. p. 210 Emmons Loom Harness Co., Lawrence. Hintons Loom Harless Co., Lawrence, Mass. p. 215
Garland Mfg. Co., Saco, Me.
Loom Reed & Harness Co., Charlotte, N.C.
Moore, C., & Co., Philadelphia, Pa.
Steel Heddle Mfg. Co., Philadelphia, Pa. p. 214

### HEATERS

### -Feed Water

Alberger Heater Co., Buffalo, N.Y. Baragwanath & Son, Wm., Chicago, Ill. Griscom Russell Co., New York, N.Y. Harrison Safety Boiler Works, Philadelphia, Pa. Houston, Stanwood & Gamble Co., Cincinnati, O. Keeler Co., E., Williamsport, Pa. National Pipe Bending Co., The, New Haven, Conn. Scaife & Sons Co., Wm. B., Pittsburgh, Pa.

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p. 250 Stewart Heater Co., Buffalo, N.Y. Walsh & Weidner Boiler Co., The, Chatta-nooga, Tenn. p. 246 Whitlock Coil Pipe Co., Hartford, Conn. Worthington Pump & Machinery Corp'n, New

### HEATERS AND PURIFIERS

### -Feed Water

Elliott Co., Pittsburgh, Pa. Griscom Russell Co., New York, N.Y. Harrison Safety Boiler Works, Philadelphia, Pa. Hoppes Mfg. Co., Springfield, O. National Pipe Bending Co., The, New Haven, Conn. Platt Iron Works, Dayton, O. Stewart Heater Co., Buffalo, N.Y. Webster & Co., Warren, Camden, N.J.

### HEATING SYSTEMS

### –Vacuum

Consolidated Engineering Co., Chicago, Ill. Dunham Co., C. A., Chicago, Ill. Illinois Engineering Co., Chicago, Ill. Keeler Co., E., Williamsport, Pa. Webster & Co., Warren, Camden, N.J.

### HEATING AND VENTILATING APPARA-TUS

American Blower Co., Detroit, Mich. American District Steam Co., N. Tonawanda, N.Y.

N. 1.
American Radiator Co., Chicago, Ill.
Buffalo Forge Co., Buffalo, N.Y. p. 235
Carrier Engineering Corb., New York, N.Y.
Consolidated Engineering Co., Chicago, Ill.
Massachusetts Blower Co., Watertown, Mass. Parks=Cramer Co., Fitchburg, Mass. DD. 232-3

252-5 Smith Co., H. B., Westfield, Mass. Sturtevant Co., B. F., Boston, Mass. Webster & Co., Warren, Camden, N.J.

### HEDDLES AND FRAMES

Firth, William, Boston, Mass. p. 191 Garland Mfg. Co., Saco, Me. Gowdey Reed & Harness Mfg. Co., J. A., Provi-dence, R.I. Loom Reed & Harness Co., Charlotte, N.C. Steel Heddle Mfg. Co., Philadelphia, Pa.

p. 214
Walker Mfg. Co., Philadelphia, Pa.
Williams, J. H., Co., Chicago, Ill.

### HOBBING MACHINES

Barber=Colman Co., Rockford, III. p. 208

Barber-Colman Co., Rockford, Ill. p. 208

# HOSE

### -Rubber

Boston Belting Co., Boston, Mass. Boston Woven Hose & Rubber Co., Cambridge, Mass

Goodrich Co., B. F., Akron, O. Goodyear Tire & Rubber Co., Akron, O. Gutta Percha & Rubber Mfg. Co., New York,

Johns-Manville Co., H. W., New York, N.Y. New York Belting & Packing Co., New York, N.Y. New York Rubber Co., New York, N.Y. Quaker City Rubber Co., Philadelphia, Pa. Revere Rubber Co., Chelsea, Mass.

### HUMIDIFIERS

American Blower Co., Detroit, Mich. American Moistening Co., Boston, Mass. p. 234

Braemer Air Conditioning Corp'n, Philadelphia, Pa.

Carrier Air Conditioning Co., Buffalo, N.Y. Carrier Engineering Corp'n, New York, N.Y. Normalair Co., Winston-Salem, N.C. Parks-Cramer Co., Fitchburg, Mass. pp. 232-3

Tillotson Humidifier Co., Providence, R.I.

### HYDRANTS, FIRE

Darling Pump & Mfg. Co., Ltd., Williamsport, Fa.
Eddy Valve Co., Waterford, N.Y.
Kennedy Valve Mfg, Co., Elmira, N.Y.
Ludlow Valve Mfg, Co., Troy, N.Y.
Norwood Engineering Co., Florence, Mass.
Pratt & Cady Co., Inc., Hartford, Conn.
Wood & Co., R. D., Philadelphia, Pa.
Worthington, Puny, & Machingy, Corp.'n Worthington Pump & Machinery Corp'n, New York, N.Y.

### HYDRO=EXTRACTORS

American Laundry Machinery Co., Cincinnati, O. American Tool & Machine Co., Boston, Mass. Hunt Machine Co., Rodney, Orange, Mass. Street and Co., R. R., Chicago, Ill.

Textile-Finishing Machinery Co., The, Providence, R.I. p. 223
Tolhurst Machine Works, Troy, N.Y.

### INDICATORS

### -Engine

American Steam Gauge & Valve Mfg. Co., Bos-

ton, Mass.
Crosby Steam Gage & Valve Co., Boston, Mass.
Powell Co., The Wm., Cincinnati, O. Robertson & Sons, James L., New York, N.Y. Thompson & Co., Richard, New York, N.Y. Trill Indicator Co., Corry, Pa.

### INDIGO

Arnold, Hoffman & Co., New York, N.Y.

Cronkhite Co., The Leonard W., Boston, Mass. Klipstein & Co., A., New York, N.Y. Kuttroff, Pickhardt & Co., New York, N.Y. p. 239

National Aniline & Chemical Co., Inc., New York, N.Y. p. 236 Zobel Company, Inc., Ernst, Brooklyn, N.Y.

### INDUSTRIAL HOUSING

Aberthaw Construction Co., Boston, Mass. pp. 270-1

Aladdin Company, Bay City, Mich. p. 275 Casper Ranger Construction Co., Holyoke, Mass. p. 274 Flynt Building & Construction Co., Palmer, Mass. p. 273 General Building Co., Boston, Mass. p. 272

### INJECTORS

American Injector Co., Detroit, Mich. Crane Co., Chicago, Ill. Hancock Inspirator Co., New York, N.Y. Jenkins Bros., New York, N.Y. Nathan Mfg. Co., Flushing, N.Y. Pepherthy Injector Co., Detroit, Mich. Penberthy Injector Co., Detroit, Mich.

### INSTRUMENTS

### -Electrical Measuring

Biddle, James G., Philadelphia, Pa. Brown Instrument Co., Philadelphia, Pa. General Electric Co., Schenectady, N.Y. pp. 256-7

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Jewell Electrical Instrument Co., Chicago, Ill.
Leeds & Northrup Co., Philadelphia, Pa.
Pyrolectric Instrument Cos., Trenton, N.J.
Robert Instrument Cos., Detroit, Mich.
Taylor Instrument Cos., Rochester, N.Y.
Thompson-Levering Co., Philadelphia, Pa.
Westinghouse Electric Mfg. Co., East Pittsburgh, Pa. p. 258
Weston Electrical Instrument Co., Newark, N.J.

### INSULATING MATERIALS

### -Heat and Cold

Armstrong Cork & Insulation Co., Pittsburgh,

Fa.

Booth Felt Co., Inc., Brooklyn, N.Y.
Celite Products Co., New York, N.Y.
Ehret Magnesia Mfg. Co., Valley Forge, Pa.
Fibre Cell Asbestos Mfg. Co., Chicago, Ill.
Johns-Manville Co., H. W., New York, N.Y.
Keasbey & Mattison Co., Ambler, Pa.
Magnesia Association of America, Philadelphia,
Pa. Pa.

Na. Nightingale & Childs Co., Boston, Mass. Standard Asbestos Mfg. Co., Chicago, Ill. United States Mineral Wool Co., New York, N.Y.

### INSURANCE, LIABILITY

American Mutual Liability Insurance Co., Boston, Mass. p. 281 Federal Mutual Liability Insurance Co., Boston, Mass. p. 282

### INTER MEDIATES

Chemical Co. of America, Inc., New York, N.Y. du Pont de Nemours & Co., E. I., Wilmington, Del. p. 237

### JACOUARDS

Crompton & Knowles Loom Wks., Worces-ter, Mass. p. 210 Halton's, Thomas, Sons, Philadelphia, Pa.

### KETTLES, STEAM JACKET

E. B. Badger & Sons Co., Boston, Mass Butterworth, H. W., & Sons Co., Philadel-phia, Pa. p. 224

Duriron Castings Co., New York, N.Y. Textile=Finishing Machinery Co Providence, R.I. p. 223 Co.,

### KIERS

(See Bleaching Kiers)

### KNITTING MACHINES

Scott & Williams, Inc., New York, N.Y. p. 220

### KNOTTERS

Barber=Colman Co., Rockford, Ill. p. 208

Royle & Sons, John, Paterson, N.J. p. 217

### LAMPS

### -Electric

Cooper Hewitt Electric Co., Hoboken, N.Y. General Electric Co., Schenectady, N.Y.

Westinghouse Electric & Pittsburgh, Pa. p. 258 Westinghouse Lamp Co. & Mfg. Co., East

Whitelite Electric Company, New York, N.Y.

Barber Mfg. Co., Lowell, Mass.

### LEATHERS

### -Textile

Bond Co., Charles, Philadelphia, Pa. Graton & Knight Mtg. Co., The, Worcester, Mass. Jacobs Mfg. Co., E. H., Danielson, Conn. p. 218 Schieren Co., Chas. A., New York, N.Y.

### LIABILITY INSURANCE

American Mutual Liability Insurance Co., Boston, Mass. p. 281 Federal Mutual Liability Ins. Co., Boston, Mass. p. 282

Barber Mfg. Co., Lowell, Mass,

### LOCKERS

### —Metal

Berger Mfg. Co., Canton, O. Durand Steel Locker Co., Chicago, Ill.
Edwards Mfg. Co., Cincinnati, O.
Lupton's Sons Co., David, Philadelphia,
Pa. p. 276 Manufacturing Equip. & Mfg. Co., Framingham, Narragansett Machine Co., Providence, R.I.

### LOGWOOD

Kuttroff, Pickhardt & Co., New York, N.Y. p. 239 National Aniline & Chemical Co., Inc., New York, N.Y. p. 236

### LOOM DROP WIRES

Greist Mfg. Co., The, New Haven, Conn. p. 199

Hopedale Mfg. Co., Milford, Mass. p. 212

### LOOM HARNESS

Crompton & Knowles Loom Wks., Worces= ter, Mass. p. 210 Emmons Loom Harness Co., Lawrence,

Mass. p. 215 Steel Heddle Mfg. Co., Philadelphia, Pa. p. 214

### LOOM PICKERS

Garland Mfg. Co., Saco, Me. Graton & Knight Mfg. Co., The, Worcester, Mass. Jacobs Mfg. Co., E. H., Danielson, Conn. p. 218

### LOOMS

Crompton & Knowles Loom Wks., Worcester, Mass. p. 210

Draper Corporation, Hopedale, Mass. pp. 185, 209

Hopedale Mfg. Co., Milford, Mass. p. Mason Machine Works, Taunton, Mass. p. 212 186

Saco-Lowell Shops, Boston, Mass. p. 187 Stafford Co., The, Readville, Mass. p. 211 Whitin Machine Works, Whitinsville, Mass. p. 184

-Circular

Royle & Sons, John, Paterson, N.J. p. 217

### LOOM STRAPS

Jacobs Mfg. Co., E. H., Danielson, Conn. p. 218

### LOOM SUPPLIES

Jacobs Mfg. Co., E. H., Danielson, Conn. p. 218

LOOM SUPPLIES, for Narrow Fabrics Pratt, Robert G. Worcester, Mass.

### LUBRICANTS

Adbany Lubricating Co., New York, N.Y.
Borne, Scrymser Co., New York, N.Y. p. 240
Indian Refining Co., Inc., New York, N.Y.
Harris, A. W., Co., Providence, R.I.
Kellogg & Co., E. II., New York, N.Y.
Keystone Lubricating Co., Philadelphia, Pa.

Keystone Lubricating Co., Philadelphia, Pa. McCord Mfg. Co., Inc., Detroit, Mich. New York & New Jersey Lubricant Co., New York, N.Y. p. 244
Philadelphia Grease Mfg. Co., Philadelphia, Pa. Richardson-Phenix Co., The, Milwaukee, Wis. Robinson & Son Co., Wm. C., Baltimore, Md. Standard Oil Co., New York, N.Y. Swan & Finch Co., New York, N.Y. Texas Co., New York, N.Y. D. 245
Vacuum Oil Co., New York, N.Y. White & Bagley Co., Worcester, Mass.

### **LUBRICATORS**

-Force-Feed

Detroit Lubricator Co., Detroit, Mich. Greene, Tweed & Co., New York, N.Y. Inter-State Machine Products Co., Rochester,

N.Y. McCord Mfg, Co., Detroit, Mich. Madison-Kipp Lubricator Co., Madison, Wis. Richardson-Phenix Co., Milwaukee, Wis.

### MARKING MACHINES

American Laundry Machinery Co., Cincinnati, O.

MEASURING AND FOLDING MACHINES Curtis & Marble Machine Co., Worcester, Mass. p. 228

Elliot & Hall, Worcester, Mass. Jefferson, Edward, Philadelphia. Pa. Parks & Woolson Machine Co., Springfield,

Vt. p. 229 Root & Co., C. J., Bristol, Conn. Smith, Wm., & Sons, Lawrence, Mass. Street & Co., R. R., Chicago, Ill.

### MECHANICAL DRAFT APPARATUS

American Blower Co., Detroit, Mich. Buffalo Forge Co., Buffalo, N.Y. p. 235 Coppus Engineering & Equipment Co., Worcester. Mass.

Engineer Co., The, New York, N.Y. Green Fuel Economizer Co., New York, N.Y. Sturtevant Co., B. F., Boston, Mass.

### MERCERIZING MACHINERY

Butterworth & Sons Co., H. W., Philadel-phila, Pa. p. 224 Jefferson, Edward, Philadelphia, Pa. Klauder-Weldon Dyeing Machine Co., Yardley,

Smith, Drum & Co., Philadelphia, Pa. Standard Processing Co., Philadelphia, Pa. Textile-Finishing Machinery Co., The, Providence, R.I. p. 223

### METERS —Steam

American District Steam Co., No. Tonawanda, N.Y.

Bailey Meter Co., Boston, Mass. Builders Iron Foundry, Providence, R.J. General Electric Co., Schenectady, N.Y. 256-7

New Jersey Meter Co., Plainfield, N.J. Republic Flow Meters Co., Chicago, Il Sargent Steam Meter Co., Chicago, Ill.

--Water

Bailey Meter Co., Cleveland, O. Buffalo Meter Co., Buffalo, N.Y. General Electric Co., Schenectady, [N.Y. pp. 256=7

pp. 230-7 Harrison Safety Boiler Works, Philadelphia, Pa. Hersey Mfg. Co., South Boston, Mass, National Meter Co., New York, N.Y. Neptune Meter Co., New York, N.Y. Neptune Meter Co., New York, N.Y.
Precision Instrument Co., Detroit, Mich.
Simmons Co., John, New York, N.Y.
Union Water Meter Co., Woreester, Mass.
Willcox Engineering Co., Saginaw, Mich.
Worthington Pump & Machinery Corp'n, New
York, N.Y.

Yarnall-Waring Co., Philadelphia, Pa.

### MILL BOXES, FIBRE

Rogers Fibre Co., Boston, Mass.

Locke Co., Charles H., Boston, Mass, Marshall, H. Newton Co., Boston, Mass.

MILL SUPPLIES

Jacobs Mfg. Co., E. H., Danielson, Conn. p. 218

### MILL VILLAGE LAUNDRY EQUIPMENT

American Laundry Machinery: Co., The, Cincinnati, O.

### MILLING CUTTERS

Barber=Colman Co., Rockford, III. p. 208

MICROSCOPICAL ANALYSIS United States Testing Co., New York, N. Y. p. 279

### MOTORS

—Electric Allis=Chalmers Mfg. Co., Milwaukee, Wis. p. 255

BurkeElectric Co., Erie, Pa. C & C Electric & Mfg. Co., Garwood, N.J. Crocker-Wheeler Co., Ampere, N.J. Diehl Mfg. Co., Elizabethport, N.J. Electro-Dynamic Co., Bayonne, N.J. Emerson Electric Mfg. Co., St. Lonis, Mo. General Electric Co., Schenectady, N.Y.

250-7
Kimble Electric Co., Chicago, Ill.
Peerless Electric Co., Warren, O.
Robbins & Myers Co., Springfield, O.
Robbins & Myers Co., Springfield, O.
Roth Bros. & Co., Chicago, Ill.
Stattevant Co., B. F., Boston, Mass.
Triumph Electric Co., The, Cincinnati, O.
Wagner Electric Mfg. Co., St. Louis, Mo.
Western Electric Co., Inc., New York, N.Y.
Westinghouse Electric & Mfg. Co., East
Pittsburgh, Pa. p. 258 256 - 7

### NAPPER ROLL GRINDERS

(See Grinding Machinery)

### NAPPING MACHINERY

Curtis & Marble Machine Co., Worcester, Mass. p. 228
Davis & Furber Machine Co., North Andover,

Mass. p. 226 Leigh & Butler, Boston, Mass. p. 192

Parks & Woolson Machine Co., Springfield, Vt. p. 229 Schwartz, L. H. A., & Co. Napping Machinery Co., Woon-Woonsocket socket, R.I.

### OIL BURNING EQUIPMENT

Anthony Co., Long Island City, N.Y. Best, Inc., W. N., New York, N.Y. Gilbert & Barker Mfg. Co., Springfield, Mass. Gwynn Gas Burner & Engineering Co., Pittsburgh, Pa.

Hammel Oil Burning Equipment Co., Providence, R.I. p. 252
Ideal Automatic Governor Co., Newark, N.J.

Ideal Automatic Governor Co., Newark, N.J. Lockett & Co., A. M., New Orleans, La. National Supply Co., Chicago, Ill. Petroleum Heat & Power Co., New York, N.Y. p. 253 Production Engineering Co., Philadelphia, Pa. Rockwell Co., W. S., New York, N.Y. Tate-Jones & Co., Inc., Pittsburgh, Pa.

### OIL REGULATORS

Petroleum Heat & Power Co., New York, N.Y. p. 253

### OIL SEPARATING MACHINES (Centrifugal)

American Tool & Machine Co., Boston, Mass De Laval Steam Turbine Co., Trenton, N.J. **p. 254** D'Olier

Centrifugal Pump & Machine Co., Philadelphia, Pa. National Separator & Machine Co., Boston,

Mass Oil & Waste Saving Machine Co., Philadelphia,

Tolhurst Machine Works, Troy, N.Y.

### OIL STORAGE SYSTEMS

Bowser & Co., Inc., S. F., Fort Wayne, Ind. Gilbert & Barker Mfg. Co., Springfield, Mass. Richardson-Phenix Co., Milwaukee, Wis. Wayne Oil Tank & Pump Co., Fort Wayne, Ind.

### -Lubricating

Albany Lubricating Co., New York, N.Y. Eagle Oil & Supply Co., Boston, Mass. Harris, A. W., Co., Providence, R.I. Houghton & Co., E. F., Philadelphia, Pa. Indian Refining Co., New York, N.Y.

New York & New Jersey Lubricant Co., New York, N.Y. p. 244 Petroleum Refining Co., Houston, Tex. Petroleum Renning Co., Houston, Tex.
Standard Oil Co. of New York, New York, N.Y.
Swan & Finch Co., New York, N.Y.
Lexas Co., New York, N.Y.
Lacum Oil Co., New York, N.Y.
Valvoline Oil Co., New York, N.Y.
White & Bagley Co., Worcester, Mass. -Textile

Arnold, Hoffman & Co., Inc., Providence, R.I. p. 238 Atlantic Refining Co., Philadelphia, Pa. Borne, Scrymser Company, New York, N.Y.

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Bosson & Lane, Atlantic, Mass. p. 241
Cone & Co., Frederick H., New York, N.Y.
Cooper & Cooper, New York, N.Y.
Cooper & Cooper, New York, N.Y.
Crew, Levick Co., Philadelphia, Pa.
Drew & Co., Inc., E. F., Boston, Mass.
Dunker & Perkins, Boston, Mass.
Dunker & Perkins, Boston, Mass.
Fancourt & Co., Inc., W. F., Philadelphia, Pa.
Garnet Co., The, Allentown, Pa.
Harding, Inc., H. C., Philadelphia, Pa.
Jackson & Co., Ellis, Philadelphia, Pa.
Jordan, Inc., W. H. & F., Jr., Philadelphia, Pa.

Kuttroff, Pickhardt & Co., New York, N.Y. p. 239

Leyland & Co., Thos., Readville, Mass. Marden, Orth & Hastings, Boston, Mass. Miller Mfg. Co., Providence, R.I. National Oil Products Co., Harrison, N.J.

National of Products Co., Harrison, N.S.
N.Y. & N.J. Lubricant Co., New York, N.Y.
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Rub-No-More Co., Fort Wayne, Ind.
Seydel Mig. Co., Jersey City, N.J.
Swan & Finch Co., New York, N.Y.
Ulco Oil Co., Detroit, Mich.
Wolf & Co., Jacques, Passaic, N.J.
Zurn Co., O. F., Philadelphia, Pa.

Firth, Wm., Boston, Mass. p. 191 H. & B. American Machine Co., Pawtucket, 11. & B. American Machine Co., Pawtucket, R.I. p. 183 Jefferson, Edward, Philadelphia, Pa. Leigh & Butler, Boston, Mass. p. 192 Saco-Lowell Shops, Boston, Mass. p. 187 Whitin Machine Works, Whitinsville, Mass. Woonsocket Mach. & Press Co., Woonsocket, R.I. p. 188

### OVERSEERS DESKS

Allen Company, New Bedford, Mass. p. 205

### OXIDIZING MACHINERY

Delahunty Dyeing Machine Co., Pittston, Pa.

### PACKAGING MACHINERY

Curtis & Marble Machine Co., Worcester, Mass. p. 228 Parks & Woolson Machine Co., Springfield, Vt. p. 229

### PACKING

### —Asbestos

Asbestos & Rubber Works of America New York, N.Y. Crane Co., Chicago, Ill. Crane Co., Chicago, III.
Federal Asbestos Co., Paterson, N.J.
Franklin Mfg. Co., Franklin, Pa.
Johns-Manwille Co., II. W., New York, N.Y.
Johns-Pratt Co., Hartford, Conn.
Keasbey Co., Robert A., New York, N.Y.
Keasbey & Mattison Co., Ambler, Pa.
McCord Mfg. Co., Inc., Detroit, Mich.
New Jersey Ashestos Co. Camden N.J. New Jersey Asbestos Co., Camden, N.J.

American Vulcanized Fibre Co., Wilmington, Del. Boston Belting Co., Boston, Mass. Cancos Mfg. Co., Philadelphia, Pa. Garlock Packing Co., Palmyra, N.Y. Goetze Gasket & Packing Co., New Brunswick,

N.J. N.J.
Goodrich Co., B. F., Akron, O.
Hamilton Rubber Mfg. Co., Trenton, N.J.
Jenkins Bros., New York, N.Y.
Johns-Manville Co., H. W., New York, N.Y.
New York Belting & Packing Co., New York,
N.Y.
N.Y. Bukhar Co., New York, N.Y.

New York Rubber Co., New York, N.Y. Quaker City Rubber Co., Philadelphia, Pa.

### PACKING LEATHER

Graton & Knight Mfg. Co., The, Worcester, Mass.

### PAINTS AND VARNISHES

Arco Company, Cleveland, O. Chaffee Co., Thos. K., Providence, R.I. Chicago White Lead & Oil Co., Chicago, Ill. Dixon Crucible Co., Jos., Jersey City, N.J. Hampden Paint & Chemical Co., Springfield, Mass.

Mass.
Harrison Works, Wilmington, Del.
Lowe Bros. Co., The, Dayton, O.
Patton Paint Co., Milwaukee, Wis.
Toch Brothers, New York, N.Y.
U. S. Gutta Percha Paint Co., Providence, R.I.
U. S. Varnish Co., New York, N.Y.
Wadsworth, Howland Co., Boston, Mass.

### PAINTING, MILL INTERIORS

Locke Co., Charles II., Boston, Mass. Marshall, H. Newton Co., Boston, Mass.

### PAPER AND TWINE

Blauvelt-Wiley Paper Mfg. Co., New York, N.Y. Consolidated Paper Tube Co., Philadelphia, Pa. Greene Paper Co., R. L., Providence, R.I. p. 231

Zoll Kelley Co., Henry C., New York, N.Y. Lane, Albert A., New York, N.Y. Merwin Paper Co., The, Hartford, Conn. O'Meara Co., Maurice, New York, N.Y. Richardson Bros., New York, N.Y.

### PAPER TUBES

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### PICKER COLLARS & LOOPS

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### PICKERS, BURR

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### PICKERS, LEATHER

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### PICKERS, RAG

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Smith & Furbush Machine Co., Philadel-phia, Pa. p. 221 Tatham, William, Ltd., Rochdale, England (Wm. Firth, Agent). p. 191

### PICKING ROOM MACHINERY

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Woonsocket Machine & Press Co., Woonsocket, R.I. p. 188

### POWER TRANSMISSION MACHINERY Allis-Chalmers Mfg. Co., Milwaukee, Wis.

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Hill Clutch Co., Cleveland, O. Hyatt Roller Bearing Co., New York, N.Y. p. 262 Hunt Machine Co., Rodney, Orange, Mass.

Hunt Machine Co., Rouney, Orange, Mass. Link-Belt Co., Chicago, III. p. 259 Lombard Iron Works & Supply Co., Augusta, Ga. Morse Chain Co., Ithaca, N.Y. pp. 269-1 Poole Engineering & Machine Co., Baltimore, Md.

Royersford Foundry & Machine Co., Philadelphia, Pa.
Weller Mfg. Co., Chicago, Ill.

Wood's Sons Co., T. B., Chambersburg, Pa.

### PREPARATORY MACHINERY

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### PRESSES

Alsteel Manufacturing Co., Battle Creek, Mich. American Laundry Machinery Co., Cincinnati, O. American Laundry Machinery Co., Cincinnati, O. Boomer & Boschert Press Co., Syracuse, N.Y. Butterworth, H. W., & Sons Co., Philadelphia, Pa. p. 224
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Dodge, C. S., Lowen, Mass. Lorimer, John H., Philadelphia, Pa. Phila. Drying Machinery Co., Philadelphia, Pa. Reliance Machine Works, Philadelphia, Pa. Saco-Lowell Shops, Boston, Mass. p. 187 Smith & Furbush Mach. Co., Philadelphia, Pa. p. 221 Spence & Rideout, Nashua, N.H.

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### PRESSES (Baling)

Economy Baler Co., Ann Arbor, Mich. Garrett & Co., Sylvester S., Philadelphia, Pa. Klein Co., H. J., Louisville, Ky. Sullivan Machinery Co., Chicago, Ill.

### PRESS BOARDS AND PAPERS

Diamond State Fibre Co., Bridgeport, Pa.

Greene Paper Co., R. L., Providence, R.1. p. 231

Merwin Paper Co., Hartford, Conn. Phila. Drying Machinery Co., Philadelphia, Pa.

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American Tool & Machine Co., Boston, Mass. Brown Co., A. & F., New York, N.Y. Caldwell & Son Co., H. W., Chicago, Ill. Chain Belt Co., Milwaukee, Wis.

Cork Insert Co., Mishawake, 1968. Cork Insert Co., Boston, Mass. Dodge Sales & Engineering Co., Mishawaka, Ind. Falls Clutch & Machinery Co., Cuyahoga Falls,

Hill Clutch Co., Cleveland, O.

Hunt Machine Co., Rodney, Orange, Mass.

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Poole Engineering & Machine Co., Bultimore,

Standard Pulley Co., Cincinnati, O.

Weller Mfg. Co., Chicago, Ill. Wood's Sons Co., T. C., Chambersburg, Pa.

### --Wood

Caldwell & Son Co., H. W., Chicago, Ill.
Detroit Pulley Co., Detroit, Mich.
Dodge Sales & Engineering Co., Mishawaka, Ind.
Eclipse Wood Pulley Co., Inc., Berlin, Pa.
Jones Foundry & Machine Co., W. A., Chicago,

Menasha Wood Split Pulley Co., Menasha, Wis. Reading Wood Pulley Co., Reading, Pa. Reeyes Pulley Co., Columbus, Ind. Weller Mfg. Co., Chicago, Ill.

### PUMPS

### -Acids and Chemicals

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-Bleaching

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Boiler Feed

American Steam Pump Co., Battle Creek, Mich. Cameron Steam Pump Works, A. S., New York,

Davidson Co., M. T., New York, N.Y.
Deming Co., Salem, O.
Douglas, W. & B., Middletown, Conn.
Epping-Carpenter Pump Co., Pittsburgh, Pa.
Goulds Manufacturing Co., Seneca Falls,
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Hall Steam Pump Co., Pittsburgh, Pa. International Steam Pump Co., New York,

Morris Machine Works, Baldwinsville, N.Y.

Platt Iron Works, Dayton, O. Reilly Mfg. Co., J. J., Louisville, Ky. Scranton Steam Pump Co., Scranton, Pa

Worthington Pump & Machinery Corp'n, New York, N.Y.

### -Centrifugal

Advance Pump & Compressor Co., Battle Creek, Mich.

Alberger Pump & Condenser Co., New York, N.Y. Allis-Chalmers Mfg. Co., Milwaukee, Wis. p. 255

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American Steam Pump Co., Battle Creek, Mich. American Well Works, Aurora, Ill.
Bagley & Sewall Co., Watertown, N.Y.
Buffalo Steam Pump Co., Buffalo, N.Y.
Cameron Steam Pump Works, A. S., New York,
N.Y.

N.Y.

Dayton Turbine Pump Co., Cleveland, O. De Laval Steam Turbine Co., Trenton, N.J.

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Gepnia, 7a. Epping-Carpenter Pump Co., Pittsburgh, Pa. Goulds Mfg. Co., Seneca Falls, N.V. p. 249 Hunt, Rodney, Machine Co., Orange, Mass. Kingsford Foundry & Machine Works, Oswego,

Lawrence Pump & Engine Co., Lawrence, Mass.

Morris Machine Works, Baldwinsville, N.Y. Morris Co., I. P., Philadelphia, Pa. Pelton Water Wheel Co., San Francisco, Cal.

Platt Iron Works, Dayton, O. Rumsey Pump Co., Ltd., Seneca Falls, N.Y United Steam Pump Co., Battle Creek, Mich. Wilson-Snyder Mfg, Co., Pittsburgh, Pa. Wood & Co., R. D., Philadelphia, Pa.

Worthington Pump & Machinery Corp'n, New York, N.Y.

### -Dveing

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-Filter Service

Goulds Manufacturing Co., Seneca Falls, p. 249 N. Y.

-Finishing

Goulds Manufacturing Co., Seneca Falls, р. 249 N.Y.

-Fire

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-Fuel Oil

Goulds Manufacturing Co., Seneca Falls, N.Y. p. 249

-Humidifier

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### --Power

Advance Pump & Compressor Co., Battle Creek,

American Steam Pump Co., Battle Creek, Mich. Buffalo Steam Pump Co., Buffalo, N.Y. Cameron Steam Pump Works, A. S., New York,

N.Y.

Dayton Pump & Mfg. Co., Dayton, O. Dean Bros. Steam Pump Works, Indianapolis, Ind.

Deming Co., Salem, O. Epping-Carpenter Pump Co., Pittsburgh, Pa. Gardner Governor Co., Quincy, Ill.

### -Sizing

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### -Water Supply

Goulds Manufacturing Co., Seneca Falls,

N.Y. p. 249
Luitwieler Pumping Engine Co., Rochester, N.Y.
Morris Machine Works, Baldwinsville, N.Y.

Moria Macanine Works, Bandwinsynie, N.1. Novo Engine Co., Lansing, Mich. Platt Iron Works, Dayton, O. Seranton Steam Pump Co., Scranton, Pa. Worthington Pump & Machinery Corp'n, New York, N.Y. York, N.Y.

### **PYROMETERS**

### —Electric

—Electric
Bristol Co., Waterbury, Conn.
Brown Instrument Co., Philadelphia, Pa.
Combustion Appliances Co., Chicago, Ill.
Eimer & Amend, New York, N.Y.
Foxboro Co., Foxboro, Mass.
Leeds & Northrup Co., Philadelphia, Pa.
Tagliabue Mfg. Co., C. J., Brooklyn, N.Y.
Taylor Instrument Co's., Rochester, N.Y.
Thwing Instrument Co., Philadelphia, Pa.
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### REGULATORS

### —Damper

American District Steam Co., North Tonawanda, N.Y.
D'Este Co., Julian, Boston, Mass.
Locke Regulator Co., Salem, Mass.
Standard Regulator Co., Newark, N.J.

# Watts Regulator Co., Lawrence, Mass. —Feed Water

American Steam Gauge & Valve Mfg. Co., Boston, Mass. Boston Steam Specialty Co., Boston, Mass. Foster Engineering Co., Newark, N.J. Jarvis Engineering Co., Boston, Mass. Northern Equipment Co., Erie, Pa.

Sorge, Jr. & Co., A., Chicago, Ill. Tagliabue Mfg. Co., C. J., Brooklyn, N.Y.

Petroleum Heat & Power Co., New York, N.Y. p. 253

### —Pressure

American District Steam Co., No. Tonawanda, N.Y.
Brown Instrument Co., Philadelphia, Pa. Crane Co., Chicago, Ill.
Davis Regulator Co., G. M., Chicago, Ill.
Foster Engineering Co., Newark, N.J.
Ideal Antomatic Governor Co., Newark, N.J.
Leslic Co., Lyndhurst, N.J.
Mason Regulator Co., Boston, Mass.
Mueller Mfg. Co., H., Decatnr, Ill.
National Regulator Co., New York, N.Y.
Tagliabue Mfg. Co., C. J., Brooklyn, N.Y.
Watts Regulator Co., Lawrence, Mass.

### RINGS, SPINNING

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### ROLLS, CALENDER

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### ROLLS, FLUTED

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Firth, William, Boston, Mass. p. 191
H. & B. American Machine Co., Pawtucket, R.I. p. 183
Metallic Drawing Roll Co., Indian Orchard,

Mass.
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N.C. p. 197 Woonsocket Machine & Press Co., Woonsocket, R.I. p. 188

### ROLLS, TOP

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### ROOFING MATERIALS

Barber Asphalt Paving Co., Philadelphia, Pa. Barrett Co., The, New York, N.Y. Certain-teed Products Corp., New York, N.Y. Penn Metal Co., Boston, Mass.

### ROPE

### —Transmission

American Mfg. Co., Brooklyn, N.Y. Columbian Rope Co., Auburn, N.Y. Dodge Sales & Engineering Co., Mishawaka, Ind. Hunt Co., Inc., C. W., West New Brighton, N.Y. Lambeth Rope Corp'n, New Bedford, Mass. Macomber & Whyte Rope Co., Kenosha, Wis, Plymouth Cordage Co., North Plymouth, Mass. St. Louis Cordage Mills, St. Louis, Mo. Waterbury Co., New York, N.Y.

### ROVING MACHINERY

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### SASH OPERATING DEVICES

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### **SCALES**

### -Automatic

—Altomatic

American Kron Scale Co., New York, N.Y.
Conveying Weigher Co., New York, N.Y.
Howe Scale Co. of N. Y., New York, N.Y.
National Scale Co., Chicopee Falls, Mass.
Richardson Scale Co., Passaic, N.J.
Simmons Co., John, New York, N.Y.
Toledo Scale Co., Toledo, O.

### Conveyer

Electric Weighing Co., New York, N.Y. Link-Belt, Chicago, Ill. p. 259

American Kron Scale Co., New York, N.Y. American Kron Seale Co., New York, N.Y.
Buffalo Scale Co., Buffalo, N.Y.
Fairbanks Co., New York, N.Y.
Jones of Binghamton, Inc., Binghamton, N.Y.
Standard Scale & Supply Co., Pittsburgh, Pa.
Toledo Scale Co., Toledo, O.

### -Platform

American Kron Scale Co., New York, N.Y. Buffalo Scale Co., Buffalo, N.Y. Chatillon & Sons, John, New York, N.Y. Fairbanks Co., New York, N.Y. Howe Scale Co. of N. Y., New York, N.Y. Toledo Scale Co., Toledo, O.

### **SCHOOLS**

### —Textile

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### **SCREENS**

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### SEPARATORS

### -Oil

Austin Separator Co., Detroit, Mich. Baragwanath & Son, Wm., Chicago, Ill. Boston Steam Sp culty Co., Boston, Mass. Crane Co., Chicago, Ill. Direct Separator Co., Syracuse, N.Y. Griscom-Russell Co., New York, N.Y. Harrison Safety Boiler Works, Philadelphia, Pa. National Pipe Bending Co., The, New Haven,

Conn Ohio Blower Co., Cleveland, O.

Pittsburgh Valve, Foundry & Const. Co., Pittsburgh, Pa. Standard Steam Specialty Co., New York, N.Y. Webster & Co., Warren, Camden, N.J.

### --Steam

—Steam
Anderson Co., V. D. W., Cleveland, O.
Anstin Separator Co., Detroit, Mich.
Crane Co., Chicago, Ill.
D'Este Co. Julian, Boston, Mass.
Direct Separator Co., Syracuse, N.Y.
Griscom-Russell Co., New York, N.Y.
Hardie-Tyues Mfg. Co., Birmingham, Ala.
Harrison Saicty Boiler Works, Philadelphia, Pa.
Hoppes Mfg. Co., Springfield, O.
National Pipe Bending Co., The, New Haven,
Conn. Conn.

Ohio Blower Co., Cleveland, O. Pittsburgh Valve, Foundry & Const. Co., Pittsburgh, Pa

Webster & Co., Warren, Camden, N.J.

### SEWING MACHINES

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### SHAFTING

American Tool & Machine Co., Boston, Mass. Brown Co., A. & F., New York, N.Y. Caldwell & Son Co., H. W., Chicago, Ill. Columbia Steel & Shafting Co., Pittsburgh, Pa. Dodge Sales & Engineering Co., Mishawaka, Ind. Falls Clutch & Machinery Co., Cuyahoga Falls,

Hill Clutch Co., Cleveland, O. Hyatt Roller Bearing Co., New York, N.Y. p. 262 Link-Belt Co., Chicago, III. p. 259 Wood's Sons Co., T. B., Chambersburg, Pa.

### SHEAVES

-Rope

—Rope American Pulley Co., Philadelphia, Pa. Bass Foundry & Machine Co., Fort Wayne, Ind. Caldwell & Son Co., H. W., Chicago, Ill. Dodge Sales & Engineering Co., Mishawaka, Ind. Falls Clutch & Machinery Co., Cuyahoga Falls, ().

Hardie-Tynes Mfg. Co., Birmingham, Ala. Weller Mfg. Co., Chicago, III. p. 259 Weller Mfg. Co., Chicago, III. wellman-Seaver-Morgan Co., Cleveland, O.

### SHELVING

-Metal Berger Mfg, Co., Cleveland, O. Bernstein Mfg, Co., Philadelphia, Pa. Edwards Mfg, Co., Cincinnati, O. Lupton's Sons Co., David, Philadelphia, Pa. p. 276

Manufacturing Equip. & Supply Co., Framingham, Mass.

### SHUTTLES

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SHUTTLES, for Narrow Fabrics Robert C. Pratt. Worcester, Mass.

### SINGEING MACHINES

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Corn Products Refining Co., New York, N.Y. Corn Products Reining Co., New York, N.Y. Leyland, Thos., Co., Readville, Mass. Malt-Diastase Co., New York, N.Y. Morningstar, Chas., & Co., Inc., New York, N.Y. Seydel Mfg. Co., The, Jersey City, N.J. Sizing Specialties Co., Jersey City, N.J. Stein, Hall & Co., New York, N.Y. Wolf, Jacques & Co., Passaic, N.J. Worden Chemical Works, New York, N.Y.

### SLASHERS AND EQUIPMENT

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Drunker & Perkins, Boston, Mass.
Electric Smelt. & Alum. Co., Lockport, N.Y.
Fancourt & Co., W. F., Philadelphia, Pa.
Harding, Inc., H. C., Philadelphia, Pa.
Kenney Mig. Co., F., Boston, Mass.
Rome Soap Co., Rome, N.Y.
Seydel Mig. Co., The, Jersey City, N.J.
Standard Soap Mig. Co., Woonsocket, R.I.
Warren Soap Mig. Co., Boston, Mass. Arnold, Hoffman & Co., Inc., Providence, Warren Soap Mfg. Co., Boston, Mass.

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### SOFTENERS

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Holbrook Mfg. Co., Jersey City, N.J.
Houghton & Co., E. F., Philadelphia, Pa.
Jackson & Co., Ellis, Philadelphia, Pa.
Leyland & Co., Thos., Readville, Mass.
Marston, John P., Boston, Mass.
McNeekan Mfg. Co., David, Brooklyn, N.Y.
Quaker City Chemical Co., Philadelphia, Pa.
Seydel Mfg. Co., The, Jersey City, N.J.
Southern Chemical Laboratory, Chattanooga,
Tenn. Arnold, Hoffman & Co., Inc., Providence, Tenn.

Tanner Co., Chas. S., Providence, R.1. Wolf & Co., Jacques, Passaic, N.J. Zurn Co., O. F., Philadelphia, Pa.

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Payne, George W., & Co., Pawtucket, R.I.
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### SPOOLS

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-Pressed Steel

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### SPRINKLER SYSTEMS

Automatic Sprinkler Co. of America, New York,

General Fire Extinguisher Co., Providence, R.I. Globe Automatic Sprinkler Co., Philadelphia, Pa Rockwood Sprinkler Co. of Mass., Woreester.

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-Silent Chain

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SPROCKET WHEELS for Valve Operation Babbitt Steam Specialty Co., New Bedford,

### STACKS

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Mass. International Engineering Works, Inc., Framingham, Mass. p. 247 Rust Engineering Co., New York, N.Y. Walsh & Weidner Boiler Co., The, Chattanooga, Tenn. p. 246 Wickes Boiler Co., The, Saginaw, Mich. p. 116 248

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Ohio Blower Co., Cleveland, O.
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### VALVE OPERATING MECHANISM

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Homestead Valve Mfg. Co., Pittsburgh, Pa.

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Johnston Mfg. Co., Philadelphia, Pa.
Lings & Co., G. S., New York, N.Y.
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Robison & Son, Inc., G., New York, N.Y.
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Turner Co., J. Spencer, New York, N.Y.
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Whitmore Co., R. D., New York, N.Y.





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